THE IMPLEMENTATION OF JIGSAW TECHNIQUE IN READING CLASS OF YOUNG LEARNERS

A RESEARCH

By

Siti Mina Tamah

Ellisa Yani Widjaja

Linda Anggraiani

Ong Ervina Larissa Susanto

ENGLISH DEPARTMENT

FACULTY OF TEACHER TRAINING AND PEDAGOGY

WIDYA MANDALA CATHOLIC UNIVERSITY

JANUARY 2007

ACKNOWLEDGEMENTS

Above all, the writers would like to express their deepest gratitude to the Lord since they realize that this research would not have been completed without His blessings. In addition, the completion of this research is attributed to various encouragements of many people. To all of them they express their sincere gratitude and appreciation, but only a few may be mentioned.

The writers feel grateful to Prof. Veronica L. Diptoadi, the head of Research Institute of Widya Mandala Catholic University Surabaya. She has provided the opportunity for the writers to submit the proposal to be reviewed. The writers therefore acknowledge indebtedness also to the reviewers – J.V. Djoko Wirjawan, Ph.D., Prof. Eugenius Sadtono, Ph.D., and Prof. Dr. Wuri Soedjatmiko – who have given their valuable input for the improvement of the research.

They are also indebted to Prof. Dr. J.S. Ami Soewandi, the present Rector who has issued an official letter hence giving the chance to them to perform their planned research and assisting the students for their theses. More importantly, as this research involves a lecturer and semester 7 students programming their thesis, the financial as well as moral support is an encouragement for the respective students to really finish their study in 7 semesters.

The gratefulness also goes to Lucia Anna Kamsasi, S. Psi., Yoh. M. Annie Herawati, and Johana Djajadi, the head mistresses of SDK. St. Theresia I Surabaya, and SDK. St. Theresia II Surabaya, and SDK Yohanes Gabriel Surabaya, respectively where the data are obtained and to Afrieyola Petymia, S. Pd., Andreas Andri Sugiono, S. Pd., Fransisca Dian A., the English teachers of the schools whose classes are 'surrendered' to the writers for the treatment and the try-out. Without their permission no data can be analyzed.

The gratitude is also expressed to the fifth grade students of 2006 – 2007 school year at SDK. St. Theresia I Surabaya, and SDK. St. Theresia II Surabaya, and SDK Yohanes Gabriel Surabaya. They have participated in this study either in the try-out or in the real treatment.

The writers are completely aware that without the assistance of those people mentioned previously and others who are involved indirectly in this study and whom they

cannot mention one by one, this research will not appear in its present shape. They are therefore indebted to them.

Surabaya, January 2007

TABLE OF CONTENT

LIST OF TABLES

ABSTRACT

Traditional reading class is carried out by the teacher's reading the text being discussed then by some students' reading in turns. The classroom interaction to discuss the text is then typically teacher-centered. The teacher asks a question; the students wanting to respond raise their hands; the teacher calls on one student and the student called on tries to state the correct answer. This particular classroom structure can be altered to make the class more interactive by jigsaw technique.

Studies related to the implementation of jigsaw technique in Indonesia language classes have in fact been carried out. Most of them have focused on high school settings. Although much work has been done to date, more studies need to be performed to ascertain the implementation of jigsaw technique in other settings, in this case in elementary schools. This particular concern triggers the writers to research on the implementation of jigsaw technique in young learners reading class.

The writers are then conducting this study to achieve the objectives of (1) finding out if there is a significant difference between the reading achievement of young learners taught using jigsaw technique and the one of those taught using the traditional technique, (2) revealing elementary students' perception on the implemented jigsaw technique, and (3) depicting the classroom interaction patterns in jigsaw classroom of young learners.

A quasi-experimental research applying a non-randomized pretest-posttest control group design was administered to obtain the first research objective. The data used in this study were taken from the scores of the reading test of the fifth grade students of SDK St. Theresia II and SDK St. Yohannes Gabriel belonging to the academic year of 2006-2007. As this study was also a descriptive study concerning the second and third objectives, the data were also obtained from the questionnaire, interview, observation, and audio as well as video recordings.

This study statistically revealed that there was no significant difference on the reading comprehension achievement between the students who were taught using Jigsaw technique and the ones who were taught using traditional technique. However, positive perception on jigsaw technique was revealed from the questionnaire distributed.

This study under report also found out that the students initiated the discussion by asking others to commence, volunteering themselves to start, or reminding others to start the discussion. The students responded one another by doing what was expected - reading, answering, translating - or refusing what was expected. The students evaluated or acknowledged responses or initiations by giving correction, giving confirmation, giving other answers, or terminating the discussion neutrally.

CHAPTER I
INTRODUCTION

1.1 Background

The new curriculum - *Kurikulum Berbasis Kompetensi* (henceforth *KBK*) - is applied nation wide starting from the academic year of 2004/2005. This competence-based curriculum officially becomes the substitute of the previous 1994 Curriculum which is based on *Pendekatan Kebermaknaan* (meaningfulness approach). *KBK* is implemented to, as stated in "Kurikulum Berbasis Kompetensi Mata Pelajaran Bahasa Inggris" (2001:6), produce outputs who have competitive and comparative qualities based on national and international standard.

One of the theories underlying the emergence of *KBK* is constructivism. Kaplan (2002) puts forward that constructivism proposes that learning environment should support multiple interpretations of reality, knowledge construction as well as context-rich and experience-based activities. Guided by constructivist principles, teachers believe that learners are engaged in doing something as learning is an active process of which meaning is constructed out, and that learners learn by interaction with their fellow students, teachers and families.

Implicitly stated from the principles of constructivist thinking is that it is high time that teachers abandoned their spoon-feeding technique. The new curriculum being implemented, the Indonesian teachers are inevitably to transform their traditional class into *KBK* class. The teachers are, in other words, faced with constructivist thinking of how to involve students in relevant tasks so that the students are really engaged in the classroom.

Engaging students in *KBK* class can be realized by employing cooperative structures one of which is jigsaw. Teachers in favor of Jigsaw believe that each student owns the capability to be the contributor of knowledge. Students are encouraged to learn from their fellow students in their expert team and when they go back to their home team they are encouraged to teach one another the material they have worked on in the expert team. This jigsaw design facilitates students' interaction in the class enabling them to value each other as contributors (Aronson, 2005).

Traditional reading class is conducted by the teacher's reading the text being

discussed then by some students' reading in turns. The classroom interaction to discuss the text is then typically teacher-centered. The teacher asks a question; the students wanting to respond raise their hands; the teacher calls on one student and the student called on tries to state the correct answer. To this kind of classroom structure, Kagan (1999:16) coins the term of Whole-Class Question-Answer. This particular classroom structure can be altered to make the class more interactive by jigsaw technique.

In jigsaw technique students are grouped in 4 up to 5 students, namely 'home group'. Each student is assigned to read different part of reading text. Students with the same part make a group called an 'expert group'' to discuss and master their own part. Then they go back to their own 'home group' to exchange the information. All members of group should at last understand the whole text. Every member should be responsible for his or her own part and responsible for the success of all teammates in comprehending the text.

The issue is then related primarily to how the teacher can improve on the means to involve students in their reading class. The class teacher is challenged to implement the types of assistance their students need to accomplish a particular task as their competence grows. Simply the teacher is encouraged to bring opportunities for the students to learn maximally on their own in this case by taking part in jigsaw activities to achieve reading skill.

Studies related to the implementation of jigsaw technique in Indonesia language classes have in fact been carried out. Most of them have focused on high school settings. Although much work has been done to date, more studies need to be conducted to ascertain the implementation of jigsaw technique in other settings, in this case in elementary schools. It is this particular concern that arouses the writers to conduct a study on the implementation of jigsaw technique in young learners reading class.

1.2 Statements of the Problem

Based on the rationale mentioned above, the writers pose the following research questions:

(1) "Is there a significant difference between the reading achievement of young learners taught by using jigsaw technique and the one of those taught by using the non-jigsaw technique?"

(2) “What are the elementary school students’ perceptions on the implementation of Jigsaw technique in their reading class?”

(3) “What classroom interaction patterns exist in the expert team of jigsaw class?” of which the sub-research questions are: “How do young learners initiate the discussion?”, “How do young learners respond to initiations?”, and “How do young learners evaluate/acknowledge responses and initiations?”

1.3 Purpose of the Study

Referring to the research questions previously posed, the writers are conducting this study to achieve the objectives of (1) finding out if there is a significant difference between the reading achievement of young learners taught using jigsaw technique and the one of those taught using the traditional technique, (2) revealing elementary students’ perception on the implemented jigsaw technique, and (3) depicting the classroom interaction patterns in jigsaw classroom of young learners.

1.4 Significance of the Study

This study is expected to provide some models of jigsaw implementation and also to reveal the feedback of *KBK* implementation in general and of jigsaw class in particular. The models presented are merely illustrative. It is expected to be persuasive to encourage classroom teachers to create their own student-fronted classrooms. Particular strengths and weaknesses of the implementation can be depicted from the feedback which is in the form of students’ perception on jigsaw implementation hence assisting the curriculum planner to commence with the follow-up concerning the newly applied *KBK* in Indonesia. It is expected that this study will contribute to the belief that teaching and learning can be enhanced when the paradigm shift occurs. It is not the teacher who is the only expert in the classroom.

1.5 Limitation of the Study

This study is expected to reveal the implementation of jigsaw technique. For the first research question, the implementation is limited to the classroom interaction patterns existing in the expert team. It is also restricted to the teaching of reading only. Therefore the study focuses on the implementation of jigsaw technique in the teaching of

reading. This study is also limited to the young learners studying at the fifth grade of Elementary School.

The subject of the study is limited to the fifth year students of SDK Yohannes Gabriel Surabaya belonging to the year 2006-2007. The writer considers that the fifth year students have already had experience in reading independently. They are also old enough to work in groups.

1.6 Definition of Key Terms

Young Learners are children between the ages of 2-12 years old, approximately corresponding to the elementary school years (Santrock, 1999:18). In this study, they are children between the ages of 10-12 years old. They are students who study at Indonesia Elementary schools more particularly in grade 5.

Jigsaw is one of the cooperative learning techniques. It is a more systematic teaching technique of group work. Groups of 4 – 5 students are formed. Each group member is assigned a sub-part of material to learn and to teach to his group members. To assist in the learning, students working on the same sub-part of the material get together to decide what is important and how to teach it. After learning together in these 'expert' groups, the original groups – the home teams – reform and students teach one another.

Reading is the process of meaning construction through the dynamic interaction which involves the reader's existing knowledge, the information in the text, and the context of the reading situation (Anthony, Pearson, and Raphael, 1993 in Farrell, 2002:1).

1.7 Assumption of the Study

The subjects or sample of this study are old enough to work in groups. The selection of the reading passages are in line with the 2004 English Curriculum which is represented by the materials in the commercially published textbooks used in the schools. The teachers conducting the treatment are the student teachers who are experienced enough to implement the study since they are accustomed to working in groups and they also taught using jigsaw technique when they had their peer teaching in their TEFL class and when they did their micro teaching on campus.

1.8 Organization of the Study

This study consists of six chapters. Chapter 1 deals with the introduction of the thesis It contains background of the study, statement of the problem, purpose of the study, significance of the study, limitation of the study, definition of key terms, assumption and organization of the study. Chapter 2 deals with the review of the related literature. It covers constructivism, cooperative learning, jigsaw technique, classroom interaction, theory of reading, jigsaw technique and reading achievement, teaching English to young learners, and previous study. Chapter 3 is about research method. It discusses the research method of each research question. Chapter 4 is about data analysis and findings. Chapter 5 is presented for the discussion of the findings. The last chapter, Chapter 6, deals with conclusion. It contains the summary of the research and some recommendations.

CHAPTER II
REVIEW OF RELATED LITERATURE

2.1 Constructivism

Richards (2001:159) defines competencies as a description of the essential skills, knowledge and activities needed for effective performance of certain tasks and activities. Meanwhile Kaplan (2002) points out that constructivism is not a teaching theory, but that it is a theory of knowledge and learning. Based on those 2 defined 'competence' and 'constructivism' the writer can argue that the prominent underlying theory to deal with concerning Competency-Based Curriculum is constructivism. The following discussion is then centered on constructivism.

Constructivism, pointed out by Kaplan (2002), proposes that learning environment should support multiple interpretations of reality, knowledge construction as well as context-rich and experience-based activities. Considering the core of constructivism, Kaplan (2002) provides 10 basic guiding principles of constructivist thinking. They are as follows:

1. Learners need time to learn since learning is not instantaneous.
2. Learners are engaged in doing something as learning is an active process of which meaning is constructed out.
3. Learners learn to learn as they learn.
4. Learners need activities which engage the mind as well as the hands.
5. Learners learn by using language.
6. Learners learn by interaction with others – their fellow students, teacher and families.
7. Learners need contextual environment.
8. Learners learn by developing from their existing knowledge.
9. Learners are engaged with the world extracting meaning from their experiences.
10. Learners need motivation to accelerate their learning.

The guiding principles depicted above are in line with what Zahorik (1995) argues. The following quotation is what he puts forward concerning constructivism:

> Knowledge is constructed by humans. Knowledge is not a set of facts, concepts, or laws waiting to be discovered. It is not something that exists independent of knower. Humans create or construct knowledge as they attempt to bring meaning to their experience. Everything that we know, we have made.
>
> Zahorik (1995) in Nurhadi (2004: 44, 45)

Unlike behaviorists, constructivists believe that learning process is initiated by the students themselves. Learners construct new knowledge based on the knowledge already possessed by them. Nobody else can 'plant' this knowledge to the students; they are to do it themselves (Sumarsono, 2004:58).

What can be inferred from the principles of constructivist thinking previously presented is that it is high time that teachers abandoned their spoon-feeding technique. The traditional classroom stage should be changed. One typical way to reveal this shift is the teacher's adopting 'students teaching other students' technique. This then leads us to the next underlying theory.

2.2. Co-operative Learning

Referring to Slavin (1990), Jacobs, Lee and Ball (1996:26) point out that cooperative learning requires students to work together to learn and to be responsible for their fellow students' learning as well as their own. Similarly, Nurhadi (2004:112) defines cooperative learning as a learning approach focusing on the use of small groups of students who work together so that learning condition is maximized to attain learning objectives. Meanwhile, Felder (2005:2) viewing cooperative learning from the perspective of teaching puts forward a similar definition of cooperative learning as follows:

> Cooperative learning is a successful teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject. Each member of a team is responsible not only for learning what is taught but also for helping teammates learn, thus creating an atmosphere of achievement. Students work through the assignment until all group members successfully understand and complete it.

Felder (2005:2) argues that certain conditions must be met to result in productive cooperation instead of competitive one. The conditions are: (1) positive interdependence (the sense of 'sink or swim together'), (2) face-to-face interaction (the effort to promote each other's success), (3) individual and group accountability (the share of each student to the group achieving the goal as there is 'no hitchhiking!'), (4) interpersonal and small-group skills (the existence of leadership, decision-making, trust, communication and

conflict resolution), and (5) group processing (the reflection or the feedback on how well the group functions and what to continue or change).

Some class activities or techniques or cooperative structures widely suggested and employed are: (see Felder, 2005; Jacobs, Lee and Ball, 1996; Kagan in Orr, 1999; and Nurhadi, 2004)

1. Think-Pair-Share. Students individually think about a question posed by the teacher. They pair up to discuss it and eventually they share it with other pairs, and/or with other groups.
2. Numbered-Heads. Groups of 4 – 5 students are formed and each is given numbers. The teacher poses a question and the students think of the answer making sure each member gets it. The teacher calls out a number (e.g. 2) and each student with number 2 is asked to give the answer.
3. Inside-Outside Circle. Students form circles and stand in pairs. The inside circle faces out; the outside circle faces in. They carry out the task given. They then find new partners by rotating the circle and carry out the same task.
4. Jigsaw. Groups of 4 – 5 students (home teams) are formed and each group is assigned a part of the material to learn and then to teach to the other members in the group. More discussion on jigsaw can be found in the next sub-topic for it is important to have a separate discussion on this particular cooperative structure as the primary theory underlying this paper.

2.3 Jigsaw Technique

Initially introduced by Aronson et al. (1978), this jigsaw structure is meant to provide students with the chance to learn a material from their peers. A material is divided into sections and one section is for each student to take care of. The students who are responsible for the same section get together and form a new group of which the goal is for the students to master the section of the material and to enable them to teach the other members in their original learning group later.

2.3.1 Benefits

A teacher who employs jigsaw structure believes that her students are capable of learning by themselves. He/she believes that each student owns the capability to be the contributor of knowledge in class. Not only teachers can provide knowledge in class.

Students themselves can be the contributors. Aronson (2005) puts it: "This "cooperation by design" facilitates interaction among all students in the class, leading them to value each other as contributors to their common task."

Talking about the benefits of jigsaw structure, Aronson (2005) claims that it is an efficient way of learning. It is even more beneficial as the process in jigsaw structure encourages listening, engagement, and empathy. Here is what Aronson (2005) points out:

> What is the benefit of the jigsaw classroom? First and foremost, it is a remarkably efficient way to learn the material. But even more important, the jigsaw process encourages listening, engagement, and empathy by giving each member of the group an essential part to play in the academic activity. Group members must work together as a team to accomplish a common goal; each person depends on all the others. No student can succeed completely unless everyone works well together as a team.

2.3.2 Strategy to Conduct Jigsaw

The jigsaw classroom is very simple to use. It has several advantages. It is easy to be applied. It is an enjoyable teaching technique. It can be done in short or long period of lesson, and it can be combined with other technique. It is an efficient technique in teaching reading to children. First of all, children are assigned into groups of 4 or 5, and they name their group that indicates their identity. These groups are 'home groups' (Aronson, 2006). The groups should be diverse in gender, ethnicity, race and ability. All the members of each group are assigned the role: as leader, illustrator, speaker and encourager. The leader is usually the most mature. The speaker is the one who becomes the representative of the group in explaining to the class; the illustrator is the one who makes the illustration to help them to explain the text. The encourager should motivate all the members of the group to state their opinion or to speak.

There are various ways to assign the role for each student. For instance, children count 1 to 5. Children with number one are leaders. Children with number 2 are speakers. Children with number 3 are illustrators. Finally children with number 4 and 5 are encouragers. The passage is divided into 4-5 segments. Each child learns one segment. Each child has direct access only to his or her own segment. The children get time to read their segment from the passage at least twice and become familiar with it.

Children temporarily form the 'expert groups' (Aronson, 2006). One child from each 'home groups' joins with other children who are assigned to the same segment. In the 'expert groups', each member plays different role that can be done like in the home

groups. Students in the expert groups have some times to discuss the main points of their segment and to rehearse the presentations they will make to their 'home groups'.

After finishing the discussion, students return to their 'home groups'. Each student presents her or his segment to the group in turns. The other members of the group who do not present their segment may ask questions for clarification. The teacher floats from group to group, observing the process. Teacher may make an appropriate intervention if any group is having trouble in discussion. Eventually, it is best for the group leader to handle this task. Leaders can be trained by whispering an instruction on how to intervene, until the leader gets the hang of it. At the end of the session, teacher gives a quiz on the material so that students quickly come to realize that these sessions are not just fun.

This strategy cannot directly be implemented to teach students in Indonesia. There are some difficulties to implement Jigsaw in the traditional classroom. That is why there are some modifications to adapt the technique with the classroom situation. The numbers of students in a class are too big. The class should be divided into several big groups so that there would be 4-5 students in every home group and expert group. The class will be difficult to be handled the first time Jigsaw is used. Once the students are familiar with the technique, this difficulty can be reduced.

Another difficulty is when every member of the group is assigned a certain role. It will be more complicated to assign them a certain role because they will be confused on what should they do. In implementing the Jigsaw, at least in every group there is a leader who can help the teacher control and manage the discussion. The leader will make all the members of the group active in the discussion.

Jigsaw technique is very good to be used in teaching children to read. However, just like other techniques, jigsaw has some weaknesses that can be overcome. Some ways are as follows (Aronson, 2006):

1. Concerning the problem of dominant children, the leader should control the discussion so members have the same opportunity to speak and state their opinion. This also makes the group run effectively. There will not be one dominant member or passive one.
2. Concerning the problem of slow children, these children can be involved in the expert group discussion. Each member of expert group will help the children in understanding the passage.

2.4 Classroom Interaction

When language teaching is supposed to be communicative, classroom interaction becomes the essential issue. This is in line with what Brown (2001:165) states as follows: "In the era of communicative language teaching, interaction is, in fact, the heart of communication; it is what communication is all about." If interaction does not exist, communication does not either.

In classroom interaction, students use language to negotiate meaning. They get the chance to make use of all they have of the language. This implicitly means that it is crucial for the teacher to provide more chance for the students to interact for the sake of real-life exchanges.

2.5 Reading Theory

Ward (1984:2) states, "The majority of students of English as a foreign language may never speak much English but most of them will have to read English in order to complete their studies". It means that reading is important toward students' success. Recognizing the importance of reading towards students in learning English, many reading specialists have tried to define what reading is.

During the audiolingualism era, reading is viewed as simple speech written down. The students' reading skill is developed through the habitual recognition of the written symbol corresponding to familiar language patterns. Thus, the reading instruction can be started only after students have developed the knowledge of spoken language (Silberstein, 1987:28).

From the psycholinguistic perspective, reading is viewed as a complex information-processing skill. Goodman in Silberstein (1987:30) writes that reading is "a psycholinguistic guessing game" that involves an interaction between thought and language. According to him, comprehension in reading does not result from the precise identification of all elements of the text, but from the skill in selecting the fewest, most productive cues necessary to produce guesses, which are right the first time.

According to the interactive point of view, reading comprehension is an interactive process between the text and the reader's prior knowledge (Carrel and Eisterhold, 1983:553). Silberstein (1987:31) points out that the basic principle of this view is the role of pre-existing knowledge (schema) in helping the reader to understand the implicit information in a text. In short, this view considers that the readers are able to

comprehend the text successfully if they have the background knowledge before towards what they read.

According to Weaver (1994:15), learning to read means learning to bring meaning to a text in order to get meaning from it. Reading is shortly bringing meaning to a text to reveal its meaning. Nuttall (1996:30) pointing out a general aim for a reading program states that a reading class is held to enable learners to enjoy reading in the foreign language. To achieve the aim, a teacher needs, among others, to find out what students can and cannot do, and to choose or plan effective tasks and activities for the students.

2.6 Jigsaw Technique and Reading Achievement

The nature of jigsaw is, implicitly, a group work. In group work, students interact with their classmates. Reading a text, they are expected to construct meanings thus revealing their achievement in reading. Involved in jigsaw activities, they are expected to use reading to interact with their peers. Freire (1970) and Heath and Hoffman (1986) in Hudelson (1999) claim that the goal in teaching reading for children in elementary school settings is for them to use reading to explain, analyze, argue about and act upon the world. This communication practice involves other people. This is done in their group interaction where information exchange occurs. The students may suggest, or argue by pointing out the important details stated in the text or respond to their peers' ideas.

In line with this issue, Christison (1990) puts forward that an activity which requires an information exchange – or communication practice – among students assists them to possess a deeper understanding of the text being studied. If students achieve their reading skill, they will be able to answer the questions given. This implies that a group work technique – more particularly Jigsaw – can be employed in Reading class to enhance students' reading ability which is indicated in their ability in answering the reading comprehension questions.

2.7 Teaching Young Learners

It is widely accepted that young learners learn differently from adult students. The teaching and learning objectives of both are then quite distinct. Focusing on children learning, Rixon (1994:34-5) reveals four primary aims for foreign language learning. They cover the ideas that (1) language learning should help the general educational aim for the sake of conceptual development of children, (2) language learning should assist

children development of the skills, culture, language awareness and curiosity about the world, (3) language learning should lead to children's positive attitude toward language learning in general, and (4) language learning should assist children to acquire some language elements they study.

Driven by such language learning goals, a teacher will be required to think of appropriate activities to teach the students. This simply leads to the consideration in designing classroom activities. Williams (1994: 208-09) puts forward seven points to consider when designing ones. They are interest, challenge, purpose, language use, language input, conceptual appropriateness, and learning promotion. To this, Vale (1995:28) claims that it is not what but how children learn that matters. Children learn best when they become "the owners of their work".

2.8 Previous Study

Previous studies conducted by Sania (1998) and Kurnia (2002) provide a valuable reference for this study. Conducting a quasi-experiment study on the effect of cooperative learning using jigsaw technique in a senior high school in Surabaya, they both found out that there was an improvement in the students' reading achievement after the students were taught by using Jigsaw technique. This proposed study is carried out in a lower level of education i.e., in Elementary School to find out the effect of jigsaw technique, the young learners' perception and the expert-team interaction patterns in Jigsaw class hence revealing the main difference between this study and the previous studies.

CHAPTER III
RESEARCH METHOD

To answer the research questions set forth in section 1.2 as an attempt to achieve the objectives stated in section 1.3, the writers in this study have carried out certain methodological activities. Primarily this study employs two kinds of research design: qualitative and quantitative designs. The quantitative research design is employed to answer the first question while the qualitative one is employed to answer the second and third research questions. As each research question yields its own research method, this chapter is presented to reveal 3 sub-chapters related to the first, second and third research questions. This chapter is then intended to describe these items one by one in that order.

3.1 Research Method to Answer the First Research Question

3.1.1 Research Design

This study is a quasi-experiment applying a non-randomized pretest-posttest control group design. The choice of this design was based on the consideration that it was not just possible to randomly assign subjects to group. The writer used the two existing classrooms.

Before the experiment started, a pretest was administered to the existing group, both the experimental and the control groups. After the treatments had been completed, a posttest was administered to both groups. Their mean scores were compared and tested at .05 level of significance to determine the effects of treatments.

The design of this study could be illustrated as follows:

The Research Design

Group	Pretest	Treatment	Posttest
E	Y1	X1	Y2
C	Y1	X2	Y2

Where: E refers to the experimental group where jigsaw was conducted.
C refers to the control group where no jigsaw was conducted.
Y1 refers to the observation in the pretest before the treatment was given.
Y2 refers to the observation in the posttest after the treatment was given.
X1 refers to the treatment the students got in the experimental group.
X2 refers to the treatment the students got in the control group.

3.1.2 Variables

This study used two types of variables: (1) independent variables, and (2) dependent variables. The independent variables referred to the Jigsaw technique used in the experimental group, and to the non-jigsaw technique (the teacher-centered whole class discussion technique) in the control group. The dependent variables referred to the students' reading comprehension which was represented in the students' post-test scores.

3.1.3 Treatments

The treatment was done three times for each group, experimental and control group. The treatment was done once a week with the time limitation of 40 minutes. There was a pretest before the treatments and a posttest after the treatments for both groups.

3.1.3.1 Treatment in the Experimental Group

The students in the experimental group were taught using Jigsaw technique. The materials given for the treatments consisted of reading passages and the comprehension questions.

First, the teacher performed the pre-instructional activities. The teacher greeted the students, asked some triggering questions based on the pictures on the white board and stated the objective of the lesson.

Second, she carried out the whilst-instructional activities. The students were divided into three big groups: Apple, Banana and Cherry to make it easier for the grouping and to reduce confusion as the class was big. It was based on the rows. Then each big group was divided into four small groups. Each group consisted of four students. There were 12 small groups: Apple 1, Apple 2, Apple 3, Apple 4, Banana 1, Banana 2, Banana 3, Banana 4, Cherry 1, Cherry 2, Cherry 3 and Cherry 4. The groups formed were called home teams. Then the teacher distributed four student's worksheets and four cards with numbers 1, 2, 3 and 4 written on each card for each home team. Each student in home team got one student's worksheet and one card. Next, the teacher asked them to read the whole passage silently. After that, the teacher formed the students into expert teams. The students who had card number 1 in Apple group formed one group, the students who had card number 2 in Apple group formed one group, the students who had card number 3 in Apple group formed one group, and the students who had card number

4 in Apple group formed one group. The students in Banana and Cherry were also grouped similarly. Twelve expert teams were then formed. Then the teacher asked them to discuss the passage and the answers of the questions in their expert team. The students were not allowed to write anything. In turns each student shared his or her opinion. The teacher floated from group to group, observed the discussion and helped the group which had trouble. To ensure that the students discussed seriously, the teacher told them that there would be a quiz in the end of the lesson. After the students discussed in the expert teams, the teacher told the students to go back to their home teams. In their home teams, they had to share what they had got in their expert teams. Each student was given time to share. The teacher then discussed the answers of the questions.

The last was the post-instructional activity. At the end of the lesson, the students had to do the reading quiz individually. The purpose of giving the quiz in the experimental group was to make the students considered that the treatment was important. Therefore, it was expected that the students would perform well and seriously in every treatment.

Table 3.1

Treatment in the Experimental Group

Experimental Group (Students' Oriented)	*Experimental Group (Teacher's Oriented)*
- Respond to the teacher's greeting. - Answer the triggering questions. - Listen to the objective of the lesson.	- Greets the students. - Asks the triggering questions. - States the objective of the lesson.
- Form home teams. (In home team session) - Get the student's worksheets. - Read the passage silently. - Form expert teams. (In expert team session) - Discuss and share the answers. - Go back to their home teams. (In home team session) - Share the expert teams' discussion. - Discuss the answers.	- Form home teams. (In home team session) - Distributes the student's worksheets. - Asks the students to read the passage silently. - Form expert teams. (In expert team session) - Asks the students to discuss and share the answers. - Asks the students to go back to their home teams. (In home team session) - Asks the students to share the expert teams' discussion. - Asks the students to discuss the answers.
- Do the reading quiz individually.	- Asks the students to do the reading quiz individually.

3.1.3.2 Treatment in the Control Group

Students in the control group were taught using traditional technique. The materials given for control group were the same with the one given to experimental group.

Like the pre-activities in the experimental group, the ones in the control group were greeting the students, asking some triggering questions based on the pictures on the white board and stating the objective of the lesson.

The whilst-instructional activities were quite different from the ones in the experimental group. After distributing the student's worksheets, the teacher asked the students to read the text silently. Then she asked some students to read the passage per paragraph loudly. Next, she explained the difficult words asked by the students. After explaining, she asked the students to find the main idea of each paragraph orally. Then she asked the students to answer the reading comprehension questions. Next, the teacher discussed the answers of the questions.

The last was the post-instructional activity. It was the same as the one in the experimental group. The students had to do the reading quiz individually. The purpose of giving the quiz in the control group was more or less the same with the purpose of giving the quiz in the experimental group. Please refer to the next page for the summary of the treatment in the control group.

Table 3.2

Treatment in the Control Group

Control Group (Students' Oriented)	*Control Group (Teacher's Oriented)*
- Respond to the teacher's greeting. - Answer the triggering questions. - Listen to the objective of the lesson.	- Greets the students. - Asks the triggering questions. - States the objective of the lesson.
- Get the student's worksheets. - Read the passage silently. - Some students read the passage per paragraph. - Find the difficult words per paragraph. - Listen to the teacher explaining the difficult words. - Do the exercises. - Discuss the answers.	- Distributes the student's worksheets. - Asks the students to read the passage silently. - Asks some students to read the passage per paragraph. - Asks the students to find the difficult words per paragraph. - Asks the students to listen to the teacher explaining the difficult words. - Asks the students to do the exercises. - Asks the students to discuss the answers.
- Do the reading quiz individually.	- Asks the students to do the reading quiz individually.

3.1.3.3 Schedule of the Treatment

The treatments were done during three meetings. Each meeting was 40 minutes. Before administering the treatments, the writer tried out the research instrument at SDK Santa Theresia I (Santa Theresia I Elementary School Surabaya). The complete schedule of the try out and the treatments can be seen as follows:

Table 3.3

Schedule of the Try-Out

	Date	Place
The first try out	August 30, 2006	5D at SDK Santa Theresia I
The second try out	September 12, 2006	5A at SDK Santa Theresia I

Table 3.4

Schedule of the Treatment at SDK Yohannes Gabriel

No.	Date	Class		Activity
1.	22-9-2006	5B	Control Group	Pretest
2.	22-9-2006	5B	Control Group	Treatment 1
3.	22-9-2006	5A	Experimental Group	Pretest
4.	22-9-2006	5A	Experimental Group	Treatment 1
5.	29-9-2006	5B	Control Group	Treatment 2
6.	29-9-2006	5A	Experimental Group	Treatment 2
7.	6-10-2006	5B	Control Group	Treatment 3
8.	6-10-2006	5B	Control Group	Posttest
9.	6-10-2006	5A	Experimental Group	Treatment 3
10.	6-10-2006	5A	Experimental Group	Posttest

Table 3.5

Schedule of the Treatment at SDK St. Theresia II

No.	Date	Class		Activity
1.	21-9-2006	5B	Experimental Group	Pretest
2.	21-9-2006	5B	Experimental Group	Treatment 1
3.	22-9-2006	5A	Control Group	Pretest
4.	22-9-2006	5A	Control Group	Treatment 1
5.	28-9-2006	5B	Experimental Group	Treatment 2
6.	29-9-2006	5A	Control Group	Treatment 2
7.	6-10-2006	5A	Control Group	Treatment 3
8.	6-10-2006	5A	Control Group	Posttest
9.	12-10-2006	5B	Experimental Group	Treatment 3
10.	12-10-2006	5B	Experimental Group	Posttest

3.1.3.4 Instructional Material

There were 3 passages used as the materials in the treatment. The same reading passages were given for students in both groups during the experiments. Each passage contained four paragraphs. Two reading passages were made by the writer herself by adjusting to the textbook used in the school and the other was taken from a commercially published textbook for the fifth grade students of elementary school. Besides, the writer

constructed the reading comprehension questions and reading quiz exactly the same materials were used in the experimental and control groups.

3.1.4 Population and Sample

The population of this study is the fifth year elementary school students belonging to the school year of 2006-2007 of SDK St. Theresia II (Santa Theresia II Elementary School Surabaya) and SDK Yohannes Gabriel (Yohannes Gabriel Elementary School Surabaya). The samples of this study were the only two classes available at each school: classes 5A and 5B. The student samples were not selected by a randomized sampling procedure, because this study was conducted in the classroom setting. At SDK Yohannes Gabriel, class 5A was randomly decided to be the experimental group and class 5B the control group. At SDK St. Theresia II, class 5A was randomly decided to be the control group and class 5B the experimental group. At SDK Yohannes Gabriel, the sample was 96 students (48 students from each class). At SDK St. Theresia II, the sample was 84 students (43 students of 5A, and 41 students of 5B)

3.1.5 Research Instrument

A reading comprehension test was developed for this study. It was used for the pretest and posttest for the experimental and control groups. There were 26 items in the research instrument. It was administered with a time limitation of 30 minutes. The test itself was in the form of multiple choice having four options for each item with only one correct answer. Three passages were used for this test. Two reading passages were made by the writer herself by adjusting to the textbook used in the school and the other was taken from a commercially published textbook for the fifth grade students of elementary school (See Appendix 1 for the details of the instrument). The test was then tried out to know the reliability, the level of difficulty and the discrimination power of the test.

The pretest and the posttest were scored manually by the writer. There were 26 items in the test and for each correct number the obtained score was one. Therefore, if the students could answer all the items correctly, their score would be 26. It was the highest score that the students might achieve.

3.1.5.1 Validity of the Test

The instrument devised is a reading comprehension test containing thirty items of multiple choice questions each of which has four options. The type of test validity employed is the content validity since the test designed in this study is oriented on matching the test content with the instructional objective being investigated. The test materials are in fact covered in the course book used in the teaching learning process.

3.1.5.2 Reliability of the Test

The reliability of the test was ensured by employing KR Formula 21 as proposed by Gronlund (1982:133) and Brown (1996:197). The level of difficulty of each item of the test was analyzed by applying the formula of index difficulty as suggested by Gronlund (1982:102).

KR-21 Formula

$$R = \frac{K}{K-1} \cdot \left(1 - \frac{M(K-M)}{K \cdot s^2}\right)$$

Where R = reliability
M = mean
s^2 = variance of the scores
K = number of items
r_{table} = 0,316

If r is greater than r_{table}, so the test is reliable

To determine the test's reliability of this study, the test was tried out twice. The result of the calculation for the first try out was 0.7257. It was greater than 0.316, so it showed that the test achieved reliability. However, there were 8 items on the test which had low discrimination power, so the writer revised the test and did the try out again. The calculation of the second try out was 0.7742. It was also shown that the revised test was reliable (See Appendix 2 for the detailed calculation).

3.1.5.3 Level of Difficulty

To analyze the level of difficulty for each item, the writer used the level of difficulty formula (Heaton, 1979: 176).

The formula of level of difficulty is:

$$FV = \frac{R}{N}$$

Where R = correct answer, and N = number of testes
According to Heaton (1979), there are the criteria of level of difficulty:

Index difficulty (FV)	Interpretation
.00 - .14	very difficult
.15 - .29	difficult
.30 - .70	acceptable
.71 - .85	easy
.86 – 1.00	very easy

According to Ebel (1979: 89), a good test should consist of some difficult questions and some easy questions that can challenge for both better students and poorer students. The test was tried out twice because on the first try out there were 8 items which had low discrimination power.

There are four level of difficulty. They are very difficult, difficult, acceptable, easy, and very easy. The analysis of the level of difficulty for the first try out showed that no item was very difficult, one item (question 19) was difficult, twenty-two items were acceptable (questions 1, 3, 4, 5, 6, 7, 8, 9, 10, 15, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30), three items (questions 2, 11, 16) were easy and four items (questions 12, 13, 14, 23) were very easy (For the complete calculation see Appendix 3).

From the calculation of the second try out, it was known that there were still 4 numbers (2, 12, 28 and 30) who had low discrimination power, the writer decided to drop those numbers. There were 26 items in the research instrument. It contained of containing 20 acceptable questions (questions 1, 3, 4, 5, 6, 7, 8, 9, 10, 15, 17, 18, 20, 21, 22, 24, 25, 26, 27 and 29) , 1 difficult question (question 19), 2 easy questions (questions 11 and 16) and 3 very easy questions (questions 13, 14 and 23). The complete calculation can be found in Appendix 3.

3.1.5.4 Discrimination Power

The formula for estimating the Discrimination Power is:

$$D = \frac{correctU - correctL}{n}$$

Where: correct U = correct upper group

correct L = correct lower group

N = number of students in one group

According to Harris (1969), the criteria of DP are:

Discrimination Index (D)	Interpretations
-1.00 until +.19	low
+.20 until +.39	satisfactory
+.40 until +1.00	very effective

The test was tried out twice. The result of the first try out of the test showed that eight items (questions 2, 12, 13, 15, 17, 23, 28, 30) were low, eleven items (questions 1, 3, 4, 5, 8, 9, 15, 17, 21, 22, 27) were satisfactory and eleven items (questions 6, 7, 10, 18, 19, 20, 22, 24, 25, 26, 29) were very effective (For the complete calculation, see Appendix 3).

The result of the first test try out showed that there were 8 items that had low discrimination power. Those items could not really differentiate between the proficient students from the poor students. Then the writer revised the test and did the try out again.

For the second try out, the writers only analyzed the 8 items which had low discrimination index. Those were questions 2, 12, 13, 15, 17, 23, 28 and 30. The result showed that question number 2 was low, question number 12 was low, question number 13 was satisfactory, question number 15 was satisfactory, question number 17 was satisfactory, question number 23 was very effective, question number 28 was low and question number 30 was low (For the complete calculation, see Appendix 3).

Four items still had low discrimination power. Because of the writers' limited time to finish her experiment, the writer decided not to include those 4 items in the test. Therefore, the test consisted of only 26 numbers. It contained 14 satisfactory items (questions 1, 3, 4, 5, 8, 9, 11, 13, 14, 15, 16, 17, 21 and 27) and 12 very effective items (questions 6, 7, 10, 18, 19, 20, 22, 23, 24, 25, 26 and 29).

3.1.6 Data Collection Procedure

The writers first of all developed the test for the experiment. To determine the reliability, the level of difficulty and the discrimination power, the test was tried out on one of the fifth grade classes at SDK St. Theresia I. The writers chose different school because there were only two fifth grade classes at SDK St. Yohannes Gabriel and only two fifth grade classes at SDK St. Theresia II. Besides, SDK Santa Theresia I was chosen

based on the consideration that at the three schools the same books and teaching technique were used. The first try out was done on August 30, 2006. From the first try out it was found that the test was reliable, but it was not good because there were 8 items having low discrimination power. Then the writers revised the test and tried it out again. The second try out was also done at SDK St. Theresia I. It was on September 12, 2006. The result of the second try out was better than the first one, the test was also reliable, but there were still 4 items which had low discrimination power. Because of the writers' limited time, they decided to drop those 4 items. Therefore, the test consisted of only 26 items.

While preparing the test, the writers also made the lesson plans for the treatment for both experimental and control groups. For each meeting, the students discussed a reading passage and sixteen reading comprehension questions. Since there would be three meetings, the writers wrote three reading passages and sixteen questions for each. They themselves wrote the two passages and they modified a reading passage taken from "A Day with Didi" by Wihartini and Anggraeni. All of the topics were about daily activities using the Simple Present Tense. They also wrote a short quiz containing six multiple-choice questions for each passage. These quizzes were written based on the consideration that students would learn seriously during the reading passage discussion.

One of the lesson plans for the experimental group was tried out at SDK St. Theresia I on August 30, 2006. It was chosen also based on the same consideration as the one stated previously for the try out of the test. One of the writers carried out the try out of the lesson plan. Another writer observed the class. From the try out it was known that the time allocation was not proper with the real class condition and the writer had difficulty in grouping the students. Then she made the revision based on what she had observed.

After trying out the test and the Jigsaw lesson plan, the writers conducted the treatment (See Appendix 4 for the complete lesson plans for the treatments in experimental and control groups). Two of the writers (Ellisa Yani Widjaya and Ong Ervina L. Susanto) taught the classes at SDK St. Theresia II and SDK Yohannes Gabriel respectively. This was based on the considerations that the writers were qualified enough in doing the implementation since they were experienced enough to implement jigsaw techniques. They often used the technique in doing the teaching demo. The other two writers took part as the observers.

At SDK St. Theresia II, the data were obtained on September 21 and 22 , 2006 for the pretests of the experimental and for the control groups respectively and October 12 and November 6, 2006 for the posttests of experimental group and for the control group respectively.

In the experimental group, the pretest was conducted on September 21, 2006 at 11.15 until 11.45. Then from 11.50 until 12.30 the first treatment was done. On the following week, to be exact on September 28, 2006 from 11.15 until 11.55, the second treatment was implemented. The third treatment was actually scheduled on October 5, 2006. The students did not have classes because they had a rehearsal for their school anniversary celebration. The treatment was then carried out on the following week, on October 12, 2006 from 11.15 until 11.55. Five minutes later, from 12.00 until 12.30, the posttest was conducted.

In the control group, the pretest was administered on September 22, 2006 at 09.45 until 10.15. Then from 10.20 until 11.00 the first treatment was done. On the following week, to be exact on September 29, 2006 from 09.45 until 10.25, the second treatment was implemented. On the following week, on October 6, 2006, the third treatment was carried out from 09.45 until 10.25. From 10.30 until 11.00 the posttest was conducted.

At SDK Yohannes Gabriel, the first treatment for the control and experimental groups was done on the same day, September 22, 2006. For the control group the treatment was done at 07.25 until 08.45. At 07.25 - 07.55, the writer administered a pretest. The students were informed that the result of the test would be included in their final mark. The students were therefore expected to do the test seriously. Then, she prepared for the treatment. At 08.05 – 08.45, the writer conducted the treatment in the control group using traditional technique. For the experimental group the treatment was done at 09.40 until 10.30. At 09.40 – 10.10, the writer administered a pretest. The students were also informed that the result of the test would be included in their final mark. They were also expected to do the test seriously. At 10.10, the writer asked the students to collect the test. Then the writer prepared the classroom setting for the treatment. At 10.20 -11.00, the writer conducted the treatment in the experimental group using jigsaw technique.

The second treatment was done on September 29, 2006. For the control group the treatment was done at 07.25 until 08.05. The writer directly taught the students using

traditional technique. For the experimental group the treatment was done at 09.40 until 10.30. In this group, the writer directly taught the students using jigsaw technique.

The last treatment was done on October 6, 2006. For the control group the treatment was done at 07.25 until 08.45. First, it was started by giving the students the treatment using traditional technique at 07.25 – 08.05. Then the writer administered the posttest. It was from 08.05 – 08.35. The writer reminded the students to do the test seriously because the result of the test would be included in their final mark. For the experimental group the treatment was done at 09.40 until 11.00. At 09.40 – 10.20, the writer conducted the treatment in the experimental group using jigsaw technique. Then it was continued by giving the students posttest. It was at 10.10 – 10.50. The writer also reminded the students to do the test seriously because the result of the test would be included in their final mark. After conducting the posttest and getting the scores of the pre test and posttest, the writers analyzed them (see Appendix 5 for the scores obtained).

3.1.7 Data Analysis Procedure

The data of this study were obtained from the pre and posttest scores. The writers analyzed the data by preparing t-test to get the answers of the research questions. Since the t-test was used to see the means of two different groups of students, the t-test prepared was *t-test for significance of the difference between two means for independent samples* (Ferguson, 1959:137; Ary et al., 1979:147-148; Hatch and Lazaraton, 1991:261).

Firstly, the writers analyzed the pretest scores. The pretest scores obtained were used to determine whether the two groups were of more or less the same ability before the treatments were given as there were only two classes available in each class for the experiment. The *t-test for significance of the difference between two means for independent samples* was employed.

After that the writers conducted another statistical analysis. The second step of the analysis was to find out whether there was a significant difference between the posttest mean score in the experimental group and the one in the control group. The statistical formulae prepared in advance were of two types. The first type was the *t-test for independent samples* as prepared in the first step above. This t-test would be employed when the t-test in the pretest analysis resulted in a 'non-significant' answer. However, when the t-test completed resulted in a 'significant' answer revealing that the two groups employed in this study were not equal, the statistical computation – either gain scores or

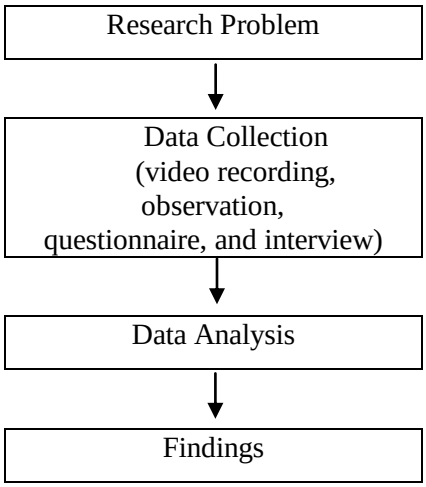
covariance – would be employed. However since "the analysis of covariance with pretest scores as the covariate are usually preferable to simple gain-score comparisons" (as claimed by Campbell and Stanley, 1963:23,49), and since the analysis of covariance is preferred to a direct comparison of gain scores because "gains are limited in size by the difference between the test's ceiling and the magnitude of the pretest score" (as claimed by Tuckman, 1988:145), the writers would employ covariance analysis – specifically, the ANCOVA (Analysis of Covariance) formula.

All the statistical calculations were performed by the help of SPSS statistical computing packages. The writers did not do manual calculation. The purpose was to save time as well as to make use of the helpful computerized program. The manual calculation was carried out when analyzing the test reliability, the level of difficulty and the discrimination power.

3.2 The Research Method to Answer the Second Research Question

3.2.1 Research Design

This study was descriptive in nature. This study presented information concerning jigsaw phenomenon. The design of this study was illustrated as follows:



The writers as previously stated in research problem wanted to find out students' perception on the implementation of Jigsaw technique. Based on the research problem formulated, the writers collected the data by using four types of instruments. They were questionnaire, interview, observation and video recordings that support each other. The

obtained data from those instruments were analyzed and interpreted. The findings were then analyzed in order to answer the research problem.

3.2.2 Subjects

This study was administered to the fifth grade (5B) students of SDK St. Theresia II and the fifth grade (5A) students of SDK Yohanes Gabriel in the academic year 2006/2007. They were the students involved as the samples in the experimental group where jigsaw technique was implemented (Refer to **3.1.4 Population and Sample**).

At SDK St. Theresia II, there were 39 students involved in this study. At SDK Yohanes Gabriel, there were 46 students. Altogether there were 85 students as the respondents of this study. They were those students present on the third treatment when they learnt using jigsaw technique.

3.2.3 Research Instrument

To obtain the data, the writers used four types of instruments. They are questionnaire, interview, video recordings and observers. Those instruments are important, useful, and effective and also support each other. Each instrument is described as follows:

3.2.3.1 Questionnaire

A questionnaire is a means of eliciting the feelings, beliefs, experiences, perception or attitude of some sample of individuals (Key, 1997). The writers chose to use questionnaire because it is a good way of collecting certain type of information quickly and because it is relatively cheap (Bell, 1993). The writers formulated a set of questionnaire in Indonesian covering ten items. They are closed questions formulated in such a way to make the students reveal their perceptions on the implementation of Jigsaw in their classroom.

In the questionnaire Likert scale was used to reveal the students' agreement or disagreement of statements related to students' perception on jigsaw technique. The questionnaire was formulated with 4 range points from 1 (strongly disagree) to 4 (strongly agree). The first range point (strongly disagree) could be chosen if the issues were less than 20 percents to be true. The respondents could choose the second range point (disagree) if the issues were around 21 percents up to 50 percents to be true. The respondents could choose the third range point (agree) if the issues were around 51

percents to 80 percents to be true. And finally, if the issues were more that 80 percents, the respondents could choose the fourth range point (strongly disagree).

There were ten statements formulated to reveal students' perception on Jigsaw technique. Those statements were divided in three categories. They include perception on expert group activities (accommodated in statements 1 – 6), perception on the home group activities (statements 7 – 8) and overall perception to the jigsaw technique (statements 9 – 10) (Please refer to Appendix 6 for the complete questionnaire).

The questionnaire was piloted first to test how long it took respondents to complete them, to check that all statements and instructions were clear and to enable the writers to remove items which were not suitable (Bell, 1993).

3.2.3.2 1nterview

According to Moser and Kalton in Bell (1993), an interview is a conversation between interviewer and respondent with the purpose of eliciting certain information from the respondent. The writers conducted interviews to 17 students in order to support, to confirm and to clarify the data obtained from the questionnaire.

The writers conducted Delphi interviews based on the statements on the questionnaire. The respondents were asked series of statements that reveal their agreement or disagreement about jigsaw. This technique of interview was conducted to clarify respondents' answers to the questionnaire. It was used to strengthen the obtained data from questionnaire. This is in line with what Birley and Moreland (1998) claim. The data from the interview were recorded and later transcribed to be analyzed (the interview transcript appears in Appendix 7).

3.2.3.3 Observers

Two of the writers who were not teaching the group and the school English teacher observed the class situation during the lesson to discover whether the respondents did in the way they claimed to behave based on their answer to the questionnaire. To assist in observing the activity, the writers made an observation checklist (see Appendix 8) that was derived from the questionnaire. Similar to the questionnaire, the observation checklist was formulated with 4 range points from 1 (strongly disagree) to 4 (strongly agree).

The first range point (strongly disagree) could be chosen if the issues were less than 20 percents to be true. The observers could choose the second range point (disagree) if the issues were around 21 percents up to 50 percents to be true. The third range point (agree) could be chosen if the issues were around 51 percents to 80 percents to be true. And finally, if the issues were more that 80 percents to be true, the observers could choose the fourth range point (strongly disagree).

The observers did the task to strengthen and support the students' answers in the questionnaire. The observers were of non-participant sort – they only observed the class situation. They did not directly participate in the lesson. The results from the observation were compared with the result of other instruments afterward as proposed by Bell (1993).

3.2.3.4 Video Recordings

Besides the observation checklist, the writers also video-recorded the students' interaction during the lesson. The writers were assisted by a cameraman to do the recordings. The video recording allowed the writers to collect the conversation and movement during the discussion, which might support the writers' interpretation of students' perception on jigsaw implementation. In other words, this video recording was used to catch any conversation and movement that the observer might miss during the observations.

3.2.4 Data

The main data to answer the second research question were the subjects' responses shown in the questionnaire. The supporting data were the students' answers to the questions in the interview, the classroom activities captured by the video-camera, and the opinion of the observers as revealed in the observation sheet.

3.2.5 Data Collection Procedure

Actually, the data were taken when the writers did the treatment concerning the first research question (refer to **3.1.3.1 Treatment in the Experimental Group**).

First of all the writers constructed a set of questionnaire in Indonesian. As previously mentioned, it consisted of closed questions in form of Likert scale.

The questionnaire was tried out when the jigsaw lesson plan was tried-out to the pilot group on August 30, 2006 (Refer to **3.1.6**). The pilot group was the fifth grade students of SDK Santa Theresia I.

After the try-out, it was found that the questionnaire was completely filled out in four minutes. From the try out, the writers found that two statements were too difficult and confusing for the respondents, therefore the two items were deleted. The questionnaire was not tried-out again because it was already clear and unambiguous for the respondents.

When the real experiment was carried out (refer to **3.1.3.3 Schedule of the Treatment**) at SDK St. Theresia II and SDK Yohanes Gabriel in three meetings of the experimental groups, the recording took place. The questionnaires were distributed only on the third meeting. The interview and observation were conducted on the same day. On October 12, 2006, the questionnaires were distributed to the fifth grade students of SDK St. Theresia II. The interview and observation were also conducted on the same day. At SDK Yohanes Gabriel, they were conducted on October 6, 2006. The schedule of the treatment is shown as follows:

Table 3.6

Schedule of Data Collection Related to the Second Research Question

Meeting	Date	Place	Instrument
First	September 21, 2006	SDK St. Theresia II	Video camcorder
Second	September 28, 2006	SDK St. Theresia II	Video camcorder
Third	October 12, 2006	SDK St. Theresia II	Video camcorder, questionnaire, interview and observation
First	September 22, 2006	SDK Yohanes Gabriel	Video camcorder
Second	September 29, 2006	SDK Yohanes Gabriel	Video camcorder
Third	October 6, 2006	SDK Yohanes Gabriel	Video camcorder, questionnaire, interview and observation

The main activities happening in the jigsaw class was divided into three parts namely pre-activity, whilst-activity and post activity. The detailed description can be found in the previous sub-chapter (**3.1.3.1 Treatment in the Experimental Group**). In the three meetings at each school, the writers were assisted by the cameraman to record the class situation during the lessons. In the third meeting, the questionnaires were distributed by the teacher. The teacher spent a little time to explain about the questionnaire before the lesson was started. When the students' worksheets were

distributed, the questionnaires were also distributed. The questionnaires were not directly filled. The students filled the questionnaire in two stages. First, after finishing the discussion in the 'expert group', the students filled in the questionnaire. They were asked to fill in numbers 1 – 6. These questions were related to their perception on 'expert group' work (See Appendix 6 for the questionnaire). Then the second was after all the members in 'home group' shared their part. The students filled in the questionnaire again. They answered questions 7 – 10. These questions were related to their perception on 'home group' work and their overall perception on jigsaw. The writers provided the table (on the next page) to describe the more detailed activities in the last treatment when the questionnaire was distributed.

In the third meeting, the observers performed their task - observing the class situation during the lesson by filling the observation checklist. After the lesson, some students were interviewed to support the reliability and the consistency of the data. Eight respondents from SDK St. Theresia II and nine respondents from SDK Yohannes Gabriel were involved. The interviews done after the class session were recorded. The recordings were then transcribed. The data from the questionnaire, interview, video recordings and observation were compared and analyzed.

Table 3.7

Activities in the Last Jigsaw Class When the Questionnaire was Distributed

Stages	Activities
Pre-Instructional Activities	*Listen to teacher's explanation about the questionnaire* - Respond to the teacher's greeting. - Answer the triggering questions. - Listen to the objective of the lesson.
Whilst- Instructional Activities	- Form home teams. (In home team session) - Get the student's worksheets and *questionnaire*. - Read the passage silently. - Form expert teams. (In expert team session) - Discuss and share the answers. *Fill in the questionnaire (questions 1-6)* - Go back to their home teams. (In home team session) - Share the expert teams' discussion. *Fill in the questionnaire (questions 7-10)* - Discuss the answers.
Post- Instructional Activities	- Do reading quiz individually

3.2.6 Procedure of Data Analysis

The data analysis was done in some steps as follows:

1. The subjects' responses from the questionnaire were tallied and the percentages were counted.
2. The data from the recorded interview was transcribed. Then, the writers compared the result of interview with the questionnaire.
3. The results of observation from the observers were compared.
4. The data from the video recording ware reviewed. Then, they were compared to the results of observation checklist.
5. The data from those four instruments were compared to support and to strengthen one

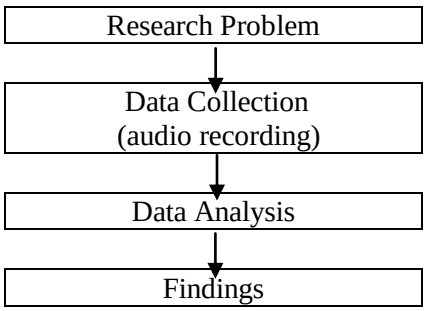
another.

6. Those data were merged into two revealing positive response and negative response. Positive response was taken from ‘strongly agree’ and ‘agree’ answers, while ‘disagree’ and ‘strongly disagree’ answers belonged to negative response.
7. The obtained data were then interpreted. When the percentage of positive response was more than 60 percents, positive perception on that particular issue was obtained. On the other hand, when the percentage of negative response was more than 60 percents, negative perception was obtained.
8. The writers finally drew the conclusion based on the findings of the questionnaire, interview, video recording and observation.

3.3 The Research Method to Answer the Third Research Question

3.3.1 Research Design

This study was descriptive in nature. It presented information concerning classroom interaction in jigsaw class. The design of this study is summarized as follows:



Based on the research problem formulated, the writers collected the data by using two types of instruments. They were audio and video recordings. The obtained data from the instrument were analyzed and interpreted. The findings were then used in order to answer the third research problem.

3.3.2 Subjects

As the third research question is similar to the second one in the design, the same students were involved. They were the fifth grade (5B) students of SDK St. Theresia II and the fifth grade (5A) students of SDK Yohanes Gabriel in the academic year

2006/2007. They were the students involved as the samples in the experimental group where jigsaw technique was implemented (Refer to **3.1.4 Population and Sample**).

At SDK St. Theresia II, there were 39 students involved in this study. At SDK Yohanes Gabriel, there were 46 students. They were those students present on the third treatment when they learnt using jigsaw technique. More particularly, they were those working in their expert teams formed in the last treatment of the experimental group (the jigsaw class).

In each class, one expert team consisting of 4 students was chosen from the expert teams formed. Altogether there were two expert teams - one from SDK St. Theresia II and one from SDK Yohannes. Gabriel. Consequently, the exact subjects were 8 students who were chosen purposively to get the data to answer the first research question.

3.3.3 Research Instrument

To obtain the data, the writers used a tape recorder. The instrument was 'hidden' inside a small bag which was put in the center of the chosen expert team. It was set to record the discussion the students had while they were trying to be the experts of that particular paragraph.

3.3.4 Data

The data were in the form of student-student interaction appearing in the expert team where the jigsaw technique was implemented. The data to be analyzed were the ones revealing how students interact or communicate hence revealing interaction patterns existing in the expert team of jigsaw class (see Appendix 9 for the expert team discussion transcript).

3.3.5 Data Collection Procedure

Similar to the one stated in the procedure to get the data for the second research question (refer to **3.2.4**), the data for the third research question were actually taken when the writers did the treatment concerning the first research question (refer also to **3.1.3.1 Treatment in the Experimental Group**).

First of all the writers made sure the 'hidden' tape recorder worked well in the class situation. On September 21, 2006 they recorded the discussion of an expert team in the

first treatment of jigsaw class at SDK St. Theresia II. On September 22, 2006 they also recorded another one at SDK Yohannes Gabriel. It was found out that the expected subjects' voice was too much disturbed by the other noise – from the whole big class who were also working or discussing their task in their groups.

The writers then tried hard to find a solution to this problem. They eventually made up their mind to do the recording outside the classroom. When the expert teams were formed, one expert team was asked to go outside the classroom to do the assigned task. They did it outside not too far away from the classroom door.

On October 6, 2006 the writers (Siti Mina Tamah and Linda Anggraini) assisted the other writer (Ong Ervina L. Susanto) who was conducting the jigsaw technique in the class. They recorded the discussion of the chosen expert team in the last treatment of jigsaw class at SDK Yohannes. On October 12, 2006 other data were also taken at SDK St. Theresia II. They recorded the discussion of another chosen expert team in the last treatment of jigsaw class taught by the other writer (Elisa Y. Widjaya).

3.3.6 Procedure of Data Analysis

The recorded data were first of all transcribed. The transcript (see Appendix 9) was then analyzed to find out the strategies used by the subjects to initiate the discussion, to respond to initiations, and to evaluate/acknowledge responses and initiations.

CHAPTER IV
DATA ANALYSIS AND FINDINGS

This chapter is presented to include the obtained data, the analysis of the data and the findings related to each research question.

4.1 Analysis and Findings Related to the First Research Question

4.1.1 The Obtained Data

Based on the previous chapter, the data to analyze were taken from the result of administering research instrument in the form of pretest and posttest of reading comprehension (See Appendix 6 to see the scores of the pretest and posttest for experimental and control groups).

At SDK St. Theresia II, when the pretest was administered, there were 40 students in VA (students 9, 22 and 24 were absent) and 41 students in VB (no one was absent). And when the posttest was conducted, there were 40 students in VA (students 30, 31 and 32 were absent) and 39 students in VB (students 13 and 41 were absent). Since the scores for testing the hypotheses were to be in pairs (pre and posttest scores of each testee), the writer dropped those having only the pre or posttest scores. There was data reduction. There were then only 37 students in VA and 39 in VB

At SDK Yohannes Gabriel, Class 5A, the experimental group, consisted of 48 students. On the day when the pretest was conducted, one student (Student 45) was absent, so there were 47 students who joined the pretest. And when the students were given the posttest, three students (Students 1, 13 and 45) were absent. Therefore, only 45 students joined the posttest. Class 5B, the control group, consisted of 48 students. When the pretest was given, one student (Student 31) was absent, so there were 47 students who joined the pretest. While for the posttest, student 31 was also absent. Therefore, there were also 47 students joining the posttest. Similarly, since the data were expected to be a set of two scores for each student who was present when the pretest and posttest were administered, the writer did not include those having only the pre or posttest scores. There were then 45 students as the sample in the Experimental Group and 47 students as the sample in the Control Group (See Appendix 6 to see the scores of the pretest and posttest for experimental and control groups after data reduction). These data were then used to test the formulated hypothesis.

4.1.2 Data Analysis

To answer the problem statement namely, "Is there a significant difference between the reading comprehension achievement of the fifth year elementary school students taught using Jigsaw technique and the one of those taught using non-jigsaw technique?", some analysis had to be done.

First, to find out whether the two groups were of more or less have equal reading ability, the writer made use of the pretest scores. The *t-test for significance of the difference between two means for independent samples* was used to analyze the scores of two groups.

Concerning the data obtained at SDK St. Theresia II, the statistical calculation revealed that the mean scores of the pretest of the two groups were significantly different. The significance value of p was found to be .012 (See Appendix 11 for the detailed calculation). Since p .012 was less than .05, the pretest mean scores of both groups were significantly different. It can be concluded that the two groups did not have more or less the same achievement before the treatment was conducted. The writer could not use t-test for independent samples for the posttest comparison. Instead, ANCOVA was used to know whether there was a significant difference between the posttest mean scores of two groups. The summary of the statistical calculation for the pretest scores at SDK St. Theresia II is presented in the table below:

Table 4.1
The Result of t-test for the Pretest Scores at SDK Theresia II

Variables	Mean	Sig. Value	Conclusion ($\alpha = .05$)
Experimental Group Control Group	14.69 17.32	.012	Significant

The summary of the statistical calculation for the pretest scores at SDK Yohannes Gabriel is presented in Table 4.2 below:

Table 4.2
The Result of t-test for the Pretest Scores at SDK Yohannes Gabriel

Variables	Mean	Sig. Value	Conclusion ($\alpha = .05$)
Experimental Group Control Group	13.74 13.55	.843	Not significant

Table 4.2 showed that the mean of the Experimental group was 13.74 while the Control group was 13.55. It was depicted that the exact significance obtained for the pretest score was .843 Since p .843 was greater than .05 (the level of significance determined), the null hypothesis was accepted; the pretest mean scores between the two groups were not significantly different. This result showed that the two groups had equal reading ability at the beginning of the treatment administration. On the next analysis, the writer directly used t-test (*t-test for significance of the difference between two means for independent samples*) in order to know whether there was a significant difference between the posttest means of the two groups. (See Appendix 11 for the detailed calculation).

The analysis of the data of the posttest scores is presented below. The summary is revealed in Tables 4.3 and 4.4.

Table 4.3
The Result of ANCOVA for the Pre-Posttest Scores of the Experimental and Control Groups at SDK Yohannes Gabriel

Variables	Mean	Sig. Value	Conclusion ($\alpha = .05$)
Experimental Group Control Group	15.79 16.46	.111	Not Significant

Based on the ANCOVA calculation, the posttest means of the control and experimental groups were not significantly different. The significance value of p was found to be .111. Since p .111 was more than .05, the hypothesis which says: ”There is a significant difference in reading comprehension achievement between the students taught by using jigsaw technique and those taught by using the traditional lecture technique” was not confirmed (The detailed calculation for this discussion can be seen in Appendix 12).

Table 4.4
The Result of t-test for the Posttest Scores of the Experimental-Control Groups at SDK Yohannes Gabriel

Variables	Mean	Sig. Value	Conclusion ($\alpha = .05$)
Experimental Group Control Group	14.13 14.26	.901	Not Significant

It was clearly indicated in Table 4.4 that the mean of the Experimental group was 14.13 while the Control group was 14.26. It showed that the exact significance obtained for the posttest score was .901 (See Appendix 13 for the detailed calculation). Since p .901 was greater than .05 (the level of significance determined), the null hypothesis was accepted; the posttest mean scores between the two groups were not significantly different.

4.1.3 Finding

The finding related to the first research question was obtained from the two different statistical analysis: ANCOVA and *t-test for significance of the difference between two means for independent samples*. The alternative hypothesis which says: ”There is a significant difference between the reading comprehension achievement of the fifth year students of elementary school who are taught using Jigsaw technique and the one of those who are taught using non-jigsaw technique” was not confirmed. The jigsaw technique did not influence the students’ reading comprehension achievement. The answer to the first research question was obviously ”There is no significant difference between the reading comprehension achievement of young learners - in this case the fifth year students of elementary school - who are taught using Jigsaw technique and the one of those who are taught using non-jigsaw technique”

4.2 Analysis and Findings Related to the Second Research Question

In this sub-chapter, the analysis about students’ perception on the implementation of Jigsaw technique is presented based on the order of items appearing in the questionnaire. The items in the questionnaire deals with self and group feedbacks. The writers use the term “self perception” for items that deal with self-feedback (item numbers 1 – 3, 7, 9, and 10). The term “group perception” is used for those which deal with group-feedback (item number 4 – 6, and 8). The items which have related topic were grouped and analyzed together as follows (1) students’ perception on expert groups, (2) students’ perception on home groups, and (3) students’ general perception on Jigsaw.

4.2.1. Perception on Expert Groups

The first six items in the questionnaire were used for obtaining students’ perception on expert groups. These six items were intended to reveal the respondents’

activeness during the discussion in the expert groups. It included (1) self-perception on sharing ideas, (2) self-perception on listening to other ideas, (3) self-perception on helping others to understand the given text, (4) group-perception on sharing ideas, (5) group-perception on helping others to understand the given text, and (6) group-perception on listening to others' ideas.

4.2.1.1 Self-perception on Sharing Ideas

Item number 1 in the questionnaire concerned about students' activeness in sharing ideas during the discussion in the 'expert group'. It particularly said, "Saya ikut memberikan ide-ide saat berdiskusi" (Translation: I share ideas during the discussion). Did the respondents strongly agree that they had shared ideas during the discussion in their expert groups?

All of the respondents of SDK Yohanes Gabriel believed that they had shared ideas during the discussion in the expert groups. There was no respondent who strongly disagreed or disagreed to this item. Seventeen respondents (36.96%) agreed that they had shared ideas during the discussion while the rest 29 respondents (63.04%) strongly agreed to this item. Please refer to Table 4.5 below.

Table 4.5
Self-Perception on Sharing Ideas
(SDK Yohannes Gabriel)

I share ideas during the discussion	Total	%
Strongly Disagree	0	0
Disagree	0	0
Agree	17	36.96
Strongly Agree	29	63.04
Total	46	100

This finding was merged into positive and negative perception then. As mentioned previously, no respondent strongly disagreed and disagreed that they had shared ideas during the discussion so no respondent had negative perception. All 46 respondents (100%) had positive perception on self-sharing ideas. They claimed they had shared ideas during the discussion. The details are summarized in the table presented on the next page.

Table 4.6
Summarized Self-Perception on Sharing Ideas
(SDK Yohannes Gabriel)

I share ideas during the discussion	Total	%
Negative perception	0	0
Positive perception	46	100
Total	46	100

Unlike at SDK Yohannes Gabriel, at St. Theresia II there was one respondent (2.56%) who strongly disagreed that they had shared ideas during the discussion in the expert groups. Most of them believed that they had shared ideas during the discussion. Eight respondents (20.51%) only agreed and the other 30 respondents (76.92%) strongly agreed to this item. This result is illustrated in Table 4.7.

Table 4.7
Self-Perception on Sharing Ideas
(SDK St. Theresia II)

I share ideas during the discussion	Total	%
Strongly Disagree	1	2.56
Disagree	0	0
Agree	8	20.51
Strongly Agree	30	76.92
Total	39	100

The writers merged this result into positive and negative perception. As it was briefly described in Table 4.8 below, one respondent (2.56%) had negative perception toward their own activeness in sharing ideas while the rest 38 respondents (97.44%) had positive perception.

Table 4.8
Summarized Self-Perception on Sharing Ideas
(SDK St. Theresia II)

I share ideas during the discussion	Total	%
Negative perception	1	2.56
Positive perception	38	97.44
Total	39	100

4.2.1.2 Self-Perception on Listening to Others' Ideas

The second item was formulated to ask respondents' attention in listening to their group mates' ideas during the expert groups' discussion. The item led the writers to

reveal self-perception on listening to others' ideas. In English, it said, "I listen attentively to my group mates who also share ideas". The result of data analysis from SDK Yohannes Gabriel on this item is illustrated in the following table:

Table 4.9
Self-Perception on Listening to Others' Ideas
(SDK Yohannes Gabriel)

I listen attentively to my group mates who share ideas during the discussion	Total	%
Strongly Disagree	0	0
Disagree	1	2.17
Agree	18	39.13
Strongly Agree	27	58.7
Total	46	100

There was no respondent who strongly disagreed and there was only one respondent (2.17%) who disagreed that he or she had listened attentively to her or his group mates. He or she believed that he or she was occupied with other activities when the others shared ideas. Eighteen respondents (39.13%) agreed that they had listened attentively to their group mates. And the rest 27 respondents (58.7%) strongly agreed to this statement.

From the result above, it was concluded that one respondent had negative perception (2.17%) toward his or her attention in listening to others while 45 respondents (97.83%) had positive perception. The finding depicted in this paragraph can be easily seen in Table 4.10.

Table 4.10
Summarized Self-Perception on Listening to Others' Ideas
(SDK Yohannes Gabriel)

I listen attentively to my group mates who share ideas during the discussion	Total	%
Negative perception	1	2.17
Positive perception	45	97.83
Total	46	100

Interestingly, all of the respondents at SDK St. Theresia II believed that they had listened to their group mates' when their group mates shared ideas during their discussion in the expert groups. Out of 39 respondents, 8 respondents (20.51%) agreed to this and 31 respondents (79.49%) strongly agreed to this item. The result of this analysis is presented in Table 4.11.

Table 4.11
Self-Perception on Listening to Others' Ideas
(SDK St. Theresia II)

I listen attentively to my group mates who share ideas during the discussion	Total	%
Strongly Disagree	0	0
Disagree	0	0
Agree	8	20.51
Strongly Agree	31	79.49
Total	39	100

When the result above was merged into positive and negative perceptions, the writers found that no respondent had negative perception (0%) toward this item. All of them, 39 respondents (100%), had positive perception concerning their attention in listening to other ideas. Please refer to Table 4.12.

Table 4.12
Summarized Self-Perception on Listening to Other Ideas
(SDK St. Theresia II)

I listen attentively to my group mates who share ideas during the discussion	Total	%
Negative perception	0	0
Positive perception	39	100
Total	39	100

4.2.1.3 Self-Perception on Helping Others Understand the Text

The third item particularly said "Saya membantu teman sekelompok saya untuk memahami bacaan" (Translation: "I help my group mates understand the text during the discussion"). This item was intended to know whether the respondents had helped their group mates understand the text. Did the respondents think that they had helped their group mates understand the text? The answer from the respondents of Yohannes Gabriel is depicted in Table 4.13 while the answer from the respondents of St. Theresia is illustrated in Table 4.14 on the next page.

Table 4.13
Self-Perception on Helping Others
(SDK Yohannes Gabriel)

I help my group mates understand the text during the discussion	Total	%
Strongly Disagree	0	0
Disagree	4	8.7
Agree	19	41.3
Strongly Agree	23	50
Total	46	100

In Yohanes Gabriel, no respondent strongly disagreed that they had helped their group mates understand the text while 4 respondents (8.7%) disagreed to that. It indicated that most of the respondents believed that they had helped their group mates understand the text. Among these respondents, 19 respondents (41.3%) agreed that they had helped their group mates and the rest 23 respondents (50%) strongly agreed to this.

The data were analyzed again to know those who had negative or positive perception. Most of the respondents (91.3%) had positive perception saying that they had helped their group mates while the rest respondents (8.7%) had negative perception. They claimed that they had not helped their group mates understand the text during the discussion. This paragraph is pointed out briefly in the following table.

Table 4.14
Summarized Self-Perception on Helping Others
(SDK Yohannes Gabriel)

I help my group mates understand the text during the discussion	Total	%
Negative perception	4	8.7
Positive perception	42	91.3
Total	46	100

Similar to the result of data analysis from SDK Yohannes Gabriel, most of respondents at SDK St. Theresia II believed that they had helped their group mates understand the text (please refer to Table 4.15). No respondent strongly disagreed with the statement given – “I help my group mates understand the text during the discussion”, while only 3 respondents (7.69%) disagreed. Nine respondents (23.08%) agreed that they had helped their group mates and the rest 27 respondents (69.23%) strongly agreed to this statement.

Table 4.15
Self-Perception on Helping Others
(SDK St. Theresia II)

I help my group mates understand the text during the discussion	Total	%
Strongly Disagree	0	0
Disagree	3	7.69
Agree	9	23.08
Strongly Agree	27	69.23
Total	39	100

From Table 4.16 below, it is indicated that 36 respondents (92.31%) had positive perception. They admitted that they had helped their group mates while only 3 respondents (7.69%) had negative perception to this issue.

Table 4.16
Summarized Self-Perception on Helping Others
(SDK St. Theresia II)

I help my group mates understand the text during the discussion	Total	%
Negative perception	3	7.69
Positive perception	36	92.31
Total	39	100

4.2.1.4 Group-Perception on Sharing Ideas

The next analysis dealt with group mates' contribution in sharing ideas. The item said, "My group mates share ideas during the discussion". This item was formulated to reveal the respondents' perception on their group mates' contribution to the discussion.

The obtained data from the respondents of SDK Yohannes Gabriel showed that only one respondent (2.17%) strongly disagreed to the statement. The other 2 respondents (4.35%) disagreed that their group mates had shared ideas during the discussion. Forty-three respondents (93.48%) pointed out their agreement to this item. Eleven respondents (23.91%) just agreed that their group mates had given ideas during the discussion. And finally, 32 respondents (69.57%) strongly agreed to the statement. This data analysis is summarized in Table 4.17.

Table 4.17
Group-Perception on Sharing Ideas
(SDK Yohannes Gabriel)

My group mates share ideas during the discussion	Total	%
Strongly Disagree	1	2.17
Disagree	2	4.35
Agree	11	23.91
Strongly Agree	32	69.57
Total	46	100

Further analysis to the data in Table 4.17 indicated that 3 respondents (6.52%) had negative perception. These respondents believed that their group mates had given ideas during the expert group discussion. Forty-three respondents (93.48%) believed that their group mates had shared ideas during the discussion. The discussion in this paragraph can be easily seen in the following table:

Table 4.18
Summarized Group-Perception on Sharing Ideas
(SDK Yohannes Gabriel)

My group mates share ideas during the discussion	Total	%
Negative perception	3	6.52
Positive perception	43	93.48
Total	46	100

Unlike at SDK Yohannes Gabriel, at SDK St. Theresia II there was no respondent who strongly disagreed with the statement – "My group mates share ideas during the discussion", and only one respondent (2.56%) disagreed that their group mates had shared ideas during the discussion. Almost all of the respondents believed that their group mates had shared ideas during the discussion. Eleven respondents (28.21%) just agreed and 27 respondents (69.23%) strongly agreed that their group mates had shared their ideas during their discussion in the expert groups. The finding is illustrated in Table 4.19 below.

Table 4.19
Group-Perception on Sharing Ideas
(SDK St. Theresia II)

My group mates share ideas during the discussion	Total	%
Strongly Disagree	0	0
Disagree	1	2.56
Agree	11	28.21
Strongly Agree	27	69.23
Total	39	100

When the obtained data was merged into two, the writers found that only one respondent (2.56%) had negative group-perception. They believed that their group mates had given little contribution in sharing ideas. Still, most of respondents believed that their group mates had given ideas during the discussion. Thirty-eight respondents (97.44%) had positive group-perception to the statement. This result can be seen in Table 4.20.

Table 4.20
Summarized Group-Perception on Sharing Ideas
(SDK St. Theresia II)

My group mates share ideas during the discussion	Total	%
Negative perception	1	2.56
Positive perception	38	97.44
Total	39	100

4.2.1.5 Group-Perception on Helping Others Understand the Text

Item number 5 was formulated to reveal the respondents' perception to group mates' assistance. It particularly said "Teman-teman saya membantu saya dalam memahami bacaan" (Translation: "My group mates help me understand the text"). Did the respondents believe that their group mates had helped them in understanding the text? The answers from the two schools are presented below.

Out of 46 respondents at SDK Yohannes Gabriel, only 6 respondents (13.04%) disagreed to say that their group mates had helped them understand the text. There are 40 respondents (86.96%) believed that their group mates had helped them in understanding the text. From those 40 respondents, 14 respondents (30.43%) agreed and 26 respondents (56.52%) strongly agreed that their group mates had helped them understand the text. The following table is presented as the summary of the findings discussed above.

Table 4.21
Group-Perception on Helping Others
(SDK Yohannes Gabriel)

My group mates also help me understand the text during the discussion	Total	%
Strongly Disagree	0	0
Disagree	6	13.04
Agree	14	30.43
Strongly Agree	26	56.52
Total	46	100

It could be inferred that 6 respondents (13.04%) had negative perception toward their group mates' contribution on helping others. Then, there were 40 respondents (86.96%) who had positive group-perception on helping others understand the given text. Please see Table 4.22.

Table 4.22
Summarized Group-Perception on Helping Others
(SDK Yohannes Gabriel)

My group mates help me understand the text during the discussion	Total	%
Negative perception	6	13.04
Positive perception	40	86.96
Total	46	100

Asked to respond to "My group mates help me understand the text", only 2 respondents (5.13%) at SDK St. Theresia II strongly disagreed. The other 2 respondents (5.13%) disagreed. Nine respondents (23.08%) agreed that their group mates' had helped them to understand the text. And the last 26 respondents (66.67%) strongly agreed that their group mates had helped them to understand the text.

The negative and positive perception could be derived from the obtained data above. Only 4 respondents (10.26%) had negative perception revealing that their group mates had helped them to understand the text. Then, 35 respondents (89.74%) had positive group-perception on helping others. The summaries of these two paragraphs are presented in Tables 4.23 and 4.24.

Table 4.23
Group-Perception on Helping Others
(SDK St. Theresia II)

My group mates also help me understand the text during the discussion	Total	%
Strongly Disagree	2	5.13
Disagree	2	5.13
Agree	9	23.08
Strongly Agree	26	66.67
Total	39	100

Table 4.24
Summarized Group-Perception on Helping Others
(SDK St. Theresia II)

My group mates help me understand the text during the discussion	Total	%
Negative perception	4	10.26
Positive perception	35	89.74
Total	39	100

4.2.1.6 Group-Perception on Listening to Others' ideas

The last item asking about respondents' perception on expert groups said, "My group mates listen to me attentively when I share ideas". This item was intended to reveal whether respondents' group mates listened to them when they gave or shared ideas. Having analyzed the answers of the respondents from SDK Yohannes Gabriel to this particular item, the writers came up with the following table:

Table 4.25
Group-Perception on Listening to Others' Ideas
(SDK Yohannes Gabriel)

My group mates listen to me attentively when I share ideas during the discussion	Total	%
Strongly Disagree	0	0
Disagree	1	2.17
Agree	18	39.13
Strongly Agree	27	58.7
Total	46	100

It can be seen from Table 4.25 that only 1 respondent (2.17%) disagreed to this item. Eighteen respondents agreed (39.13%) that their group mates had listened to them when they shared ideas during the discussion. More than half of the respondents (27/58.7% respondents) strongly agreed that their group mates had listened to them when they shared or gave ideas.

The data from Table 4.25 was merged into positive and negative perceptions then. There was only one respondent (2.17%) who had negative perception. The rest (45/97.83% respondents) had positive group perception. It is illustrated in the table presented on the next page.

Table 4.26
Summarized Group-Perceptions on Listening to Others' Ideas
(SDK Yohannes Gabriel)

My group mates listen to me attentively when I share ideas during the discussion	Total	%
Negative perception	1	2.17
Positive perception	45	97.83
Total	46	100

Out of 39 respondents at SDK St. Theresia II, no respondent strongly disagreed while only 3 respondents (7.69%) disagreed to the statement "My group mates help me understand the text". The writers found that almost all of the respondents believed that their group mates had listened to them when they shared ideas. Among these respondents, 7 respondents (17.95%) agreed and 29 respondents (74.36%) strongly agreed toward this statement. Please refer to Table 4.27

Table 4.27
Group-Perception on Listening to Others' Ideas
(SDK St. Theresia II)

My group mates listen to me attentively when I share ideas during the discussion	Total	%
Strongly Disagree	0	0
Disagree	3	7.69
Agree	7	17.95
Strongly Agree	29	74.36
Total	39	100

From the data summarized in Table 4.27 above, it could be concluded that 3 respondents (7.69%) had negative perception while 36 respondents (92.31%) had positive perception. It is illustrated in Table 4.28 below.

Table 4.28
Summarized Group mates' Listening to Others' Ideas
(SDK St. Theresia II)

My group mates listen to me attentively when I share ideas during the discussion	Total	%
Negative perception	3	7.69
Positive perception	36	92.31
Total	39	100

4.2.2 Perception on Home Groups

The next two items illustrate the respondents' perception in the home groups. These items are intended to reveal (1) self-perception on explaining their own parts and (2) group-perception on explaining different parts.

4.2.2.1 Self-perception on Explaining Ability

Item number 7 was intended to reveal self-perception on respondents' own explanation whether their explanation was understandable. It more particularly said, "I give understandable explanation". Did they think that they had explained their part clearly? The answer is depicted below.

Table 4.29
Self-Perception on Explaining Ability
(SDK Yohannes Gabriel)

I give understandable explanation	Total	%
Strongly Disagree	0	0
Disagree	2	4.35
Agree	23	50
Strongly Agree	21	45.65
Total	46	100

The obtained data from SDK Yohannes Gabriel indicated that 2 respondents (4.35%) disagreed to this item. Half of the respondents, 23 respondents (50%), agreed that they had explained their part clearly. The rest (21/45.65% respondents) strongly agreed that they had given understandable explanation when they discussed in the home groups.

From the obtained data above, the writers concluded that only 2 (4.35%) respondents gave negative perception to this item. Forty-four respondents (95.65%) gave positive perception that they had given understandable explanation when they discussed in the home groups. This paragraph is briefly described in Table 4.30.

Table 4.30
Summarized Self-Perception on Explaining Ability
(SDK Yohannes Gabriel)

I give understandable explanation	Total	%
Negative perception	2	4.35
Positive perception	44	95.65
Total	46	100

At SDK St. Theresia II, more respondents believed that they had not given clear and understandable explanation. One respondent (2.56%) strongly disagreed and 3 respondents (7.69%) disagreed that they had explained their part clearly. But still, most of the respondents believed that their explanation was clear enough. From those respondents, 12 respondents (30.77%) agreed and 23 respondents strongly agreed (58.97%) that they had given understandable explanation when they discussed in the home groups. This finding is summarized in Table 4.31.

Table 4.31
Self-Perception on Explaining Ability
(SDK St. Theresia II)

I give understandable explanation	Total	%
Strongly Disagree	1	2.56
Disagree	3	7.69
Agree	12	30.77
Strongly Agree	23	58.97
Total	39	100

The result of the data analysis above was merged into positive and negative perception as briefly described in the following table:

Table 4.32
Summarized Self-Perception on Explaining Ability
(SDK St. Theresia II)

I give understandable explanation	Total	%
Negative perception	4	10.26
Positive perception	35	89.74
Total	39	100

It was found that only 4 respondents (10.26%) had negative perception while 35 respondents (89.74%) had positive self-perception on their own explanation.

4.2.2.2 Group-Perception on Explaining Ability

Item number 8 was formulated to reveal respondents' group mates' ability in explaining when they discussed in the home groups. It said, "My group mates give understandable explanation". The respondents were asked whether their group mates' had given clear and understandable explanation. The table on the next page summarizes SDK Yohannes Gabriel Students' perception toward this issue.

Table 4.33
Group-Perception on Explaining Ability
(SDK Yohannes Gabriel)

My group mates give understandable explanation	Total	%
Strongly Disagree	1	2.17
Disagree	4	8.7
Agree	24	54.17
Strongly Agree	17	36.96
Total	46	100

Out of 46 respondents, one respondent (2.17%) strongly disagreed that their group mates had given clear explanation. Four respondents (8.7%) disagreed to this issue. More than half of the respondents, to be exact, 24 respondents (52.17%) agreed that their group mates had explained to them clearly. And finally, 17 respondents (36.96%) strongly agreed to this issue.

When the result was merged into positive and negative perception, 5 respondents (10.87%) gave negative perception to this item. But still, most of the respondents, 41 respondents (89.13%) gave positive perception toward the item. It mend that most of the respondents believed that their group mates had given understandable explanation. Please refer to Table 4.34 below.

Table 4.34
Summarized Group-Perception on Explaining Ability
(SDK Yohannes Gabriel)

My group mates give understandable explanation	Total	%
Negative perception	5	10.87
Positive perception	41	89.13
Total	46	100

Similar to those at SDK Yohannes Gabriel, 4 respondents (10.26%) at SDK St. Theresia II disagreed to this issue. Most of the respondents believed that their group mates had given clear explanation to them. It was found that nine respondents (23.08%) agreed that their group mates had explained to them clearly. The rest (26/66.67%respondents) strongly agreed to this issue. The result of this analysis is shown in Table 4.35.

Table 4.35
Group-Perception on Explaining Ability
(SDK St. Theresia II)

My group mates give understandable explanation	Total	%
Strongly Disagree	0	0
Disagree	4	10.26
Agree	9	23.08
Strongly Agree	26	66.67
Total	39	100

The result was merged into positive and negative perception then. It was found that 4 respondents (10.26%) gave negative perception while 35 respondents (89.74%) gave positive perception toward the item. In other words, most of the respondents believed that their group mates had given clear and understandable explanation. This finding is summarized in the following table:

Table 4.36
Summarized Group-Perception on Explaining Ability
(SDK St. Theresia II)

My group mates give understandable explanation	Total	%
Negative perception	4	10.26
Positive perception	35	89.74
Total	39	100

4.2.3 Students' Perception on Jigsaw

The last two items in the questionnaire illustrate the respondents' perception on Jigsaw. Finally, these two items are intended to reveal the respondents' perception about jigsaw. These two items mainly ask respondents' preference and willingness to be taught by Jigsaw.

4.2,3.1 Self-Perception on Preference to be taught by using Jigsaw

The item number 9 asked about respondents' preference to be taught by using Jigsaw. It particularly said, "I like this technique of learning". Did they like to work in groups or to discuss in two different groups?

At SDK Yohannes Gabriel, one respondent (2.17%) strongly disagreed that they liked to be taught by Jigsaw. More respondents, 4 respondents (8.7%), disagreed to this item. Most of the respondents liked to be taught by Jigsaw. Twelve respondents (26.09%)

agreed to this and 29 respondents (63.04%) strongly agreed to this issue. Please refer to the table below:

Table 4.37
Self-Perception on Preference to Be Taught by Jigsaw
(SDK Yohannes Gabriel)

I like this technique of learning	Total	%
Strongly Disagree	1	2.17
Disagree	4	8.7
Agree	12	26.09
Strongly Agree	29	63.04
Total	46	100

The data were analyzed again to find those who had positive perception and those who had the negative one. Five (10.87%) respondents gave negative perception that they liked to be taught by using Jigsaw while the rest 41 respondents (89.13%) gave positive perception. Please refer to Table 4.38.

Table 4.38
Summarized Self-Perception on Preference to Be Taught by Using Jigsaw
(SDK Yohannes Gabriel)

I like this technique of learning	Total	%
Negative perception	5	10.87
Positive perception	41	89.13
Total	46	100

Meanwhile, at SDK St. Theresia II no respondent strongly disagreed that they liked to be taught by Jigsaw. Only 2 respondents (5.13%) disagreed to the statement. Twelve respondents (30.77%) agreed and 25 respondents (64.10%) strongly agreed that they liked to be taught by using Jigsaw. The finding is clearly shown in the following table:

Table 4.39
Self-Perception on Preference to Be Taught by Using Jigsaw
(SDK St. Theresia II)

I like this technique of learning	Total	%
Strongly Disagree	0	0
Disagree	2	5.13
Agree	12	30.77
Strongly Agree	25	64.10
Total	39	100

The data on Table 4.39 were merged to find those who had negative or positive perception. It was found that two respondents (5.13%) had negative perception while the rest (37/94.87% respondents) claimed that they liked to be taught by using Jigsaw. It is illustrated in Table 4.40 below.

Table 4.40
Summarized Self-Perception on Preference to Be Taught by Using Jigsaw
(SDK St. Theresia II)

I like this technique of learning	Total	%
Negative perception	2	5.13
Positive perception	37	94.87
Total	39	100

4.2.3.2 Self-Perception on Willingness to Be Taught by Using Jigsaw

The last item was related to the previous one. It was formulated to reveal the respondents willingness to be taught by Jigsaw again. It particularly said, "I want to learn with this technique". Did they want to be taught by using Jigsaw?

Interestingly found, more respondents at SDK Yohannes Gabriel did not want to learn by using Jigsaw. One respondent (2.17%) strongly disagreed to be taught by using Jigsaw and 7 respondents (15.22%) disagreed to be taught by using Jigsaw. 14 respondents (30.43%) agreed to be taught by using Jigsaw and more than half respondents, to be exact, 24 respondents (52.17%), strongly agreed to be taught by using Jigsaw.

The obtained data above were analyzed again to get the negative and positive perception. The writers found that 8 respondents (17.39%) had negative perception toward this issue while the rest 38 respondents had positive perception. These 38 respondents (82.61%) were willing to be taught by using Jigsaw. These two paragraphs are summarized in Tables 4.41 and 4.42.

Table 4.41
Self-Perception on Willingness to Be Taught by Using Jigsaw
(SDK Yohannes Gabriel)

I want to learn with this technique	Total	%
Strongly Disagree	1	2.17
Disagree	7	15.22
Agree	14	30.43
Strongly Agree	24	52.17
Total	46	100

Table 4.42
Summarized Self-Perception on Willingness to Be Taught by Using Jigsaw
(SDK Yohannes Gabriel)

I want to learn with this technique	Total	%
Negative perception	8	17.39
Positive perception	38	82.61
Total	46	100

Similarly at SDK St. Theresia II there were more respondents who did not want to be taught by using Jigsaw than those who did not like Jigsaw. It was found that 4 respondents (10.26%) disagreed to be taught by using Jigsaw. Eight respondents (20.51%) agreed and 27 respondents (69.23%) strongly agreed to be taught by using Jigsaw. Please refer to Table 4.43.

Table 4.43
Respondents' Willingness to Be Taught by Using Jigsaw
(SDK St. Theresia II)

I want to learn with this technique	Total	%
Strongly Disagree	0	0
Disagree	4	10.26
Agree	8	20.51
Strongly Agree	27	69.23
Total	39	100

The writers merged the obtained data above. The result was that 4 respondents (10.26%) had negative perception while the rest 35 respondents (89.74%) had positive perception. Those respondents (89.74%) were willing to be taught by using Jigsaw again. This paragraph is summarized in Table 4.44 below.

Table 4.44
Summarized Respondents' Willingness to Be Taught by Using Jigsaw
(SDK St. Theresia II)

I want to learn with this technique	Total	%
Negative perception	4	10.26
Positive perception	35	89.74
Total	39	100

4.3 Analysis and Findings Related to the Third Research Question

The third research question of this study is related to the classroom interaction patterns existing in jigsaw classroom in the expert team. It is more particularly intended to reveal the ways students initiate the discussion, respond to initiations and evaluate/acknowledge responses and initiations.

4.3.1 Ways to Initiate

From the transcribed data (see Appendix 9), it is indicated that the students initiate the discussion in the expert team by making a request. One student said 'Ayo kamu dulu' [Translation: Come on, you start first] (Appendix 9; transcript 1 line 5). Analyzing down the lines in the transcript, the writer found that to initiate the discussion another student repeated his friend's answer by adding 'but' – a conjunction showing something contradictory. By adding 'but', he wanted to show his understanding in answering the question and he wanted to indirectly tell his friends. Please refer to the following script taken from Appendix 9; transcript 1 lines 12-15:

Jn:	What does Didi do in the break time? Didi plays football with his 5 friends. He does not go to the canteen.
Dd:	He plays football with his 5 friends but he .. but he doesn't go to the canteen.

Another way found in the transcript is that the student asked and offered others to read. She said: 'Yes, finished. Who wants to read the text?' (Appendix 9; transcript 1 line 31). Another similar way is by asking whether the others understood (Appendix 9; transcript 1 line 44). Similarly, the student used the question 'Diartino ta?' [Translation: Shall we translate it?] (Appendix 9; transcript 1 line 54) to invite the discussion.

Reminding is another way to initiate. Please refer to the following script taken from Appendix 9; transcript 1 lines 69-70:

Wd:	Kurang satu .. ayo sama-sama. /Still one more sentence. Let's translate it together/

It is also shown in the following statement: 'Ayo, the question. [Translation: Come on, let's go on with the question] (Appendix 9; transcript 1 line 74).

It is shown in the second script (Appendix 9) that Ko started the discussion by volunteering himself to read the paragraph. He said 'Aku yang baca ya' [Translation: Let me read, OK?] (Appendix 9; transcript 2 line 1).

Realizing that there was a mistake in the translation, Ko tried to initiate the discussion by highlighting the main point. He read the incomplete sentence twice to emphasize the negative sentence. Please read the following citation: (Appendix 9; transcript 2 lines 15-16)

Ss:	[translating 'He does not go to the canteen'] Dia berlari ke kantin.
Ko:	[trying to correct] He does not. He does not….

4.3.2 Ways to Respond

It is indicated in Appendix 9; transcript 1 line 6 that one of the students directly responded to the initiation by answering the question in the material. This way of responding was also revealed in the following script (Appendix 9; transcript 1 lines 54-57):

Kn:	Diartino ta? /Shall we translate it?/
Dd:	Pada waktu … /when…/
Wd:	Sik, sik, ada 4 paragraf. Ya, satu satu. Satu kalimat, satu kalimat. /Wait. Wait. There 4 paragraphs. Yes, one by one. One sentence, one sentence/

After Kn initiated by saying 'Diartino ta?', Dd directly translated the sentence showing the response of the initiation.

The following script (refer to Appendix 9; transcript 1 lines 69-71) also indicates the initiation which was responded by the student's performing the action expected.

Wd	Kurang satu .. ayo sama-sama. /Still one more sentence. Let's translate it together/
Ss:	He studies again at 9.30. Dia belajar lagi … jam setengah sepuluh. /half past nine/

In Appendix 9; transcript 1 lines 14-18 cited below

Dd:	[repeating] He plays football with his 5 friends but he .. but he doesn't go to the canteen.
Kn :	[repeating] He plays football
Dd:	[reading the question and answering it] Does Didi buy some food at school? No, he doesn't.

it is found out that the initiation was not responded as expected. The other students seemed to know nothing about the intention of Dd to emphasize 'but', or they might just ignore it as it was not an essential thing to discuss.

In Appendix 9; transcript 2 lines 1-4 cited below

Ko:	Aku yang baca ya. /Let me read, OK?/
Se:	Sek ta ngene ae lho, lapo dibaca? /Wait! Why should we read or translate it?/

it is obviously revealed out that the initiation was rejected. Ko wanted to start discussing the paragraph but Se refused the idea suggesting to start directly with the questions to answer.

It is also indicated in transcript 2 that one of the students directly responded to the initiation by correcting the wrong translation. In the following script (Appendix 9; transcript 2 lines 15-17):

Ss:	[translating 'He does not go to the canteen'] Dia berlari ke kantin.
Ko:	[trying to correct] He does not. He does not….
Ke + Ko:	[realizing the mistake then correcting] Dia tidak berlari ke kantin

Ke and Ko responded by translating 'Dia tidak berlari ke kantin' to correct the wrong one 'Dia berlari ke kantin'.

4.3.3 Ways to Evaluate/Acknowledge Responses and Initiations

Saying 'Ayo, kamu dulu', Dd initiated the discussion. Jn directly answered the question in the material. This particular response was then evaluated or acknowledged by Wd. He realized the answer was not 'Didi's going to school' but 'Didi's playing at school'. He evaluated by providing direct correction. Please take a look at the script below (Appendix 9; transcript 1 lines 5-9)

Dd:	Ayo kamu dulu /Come on, you start first/
Jn :	[reading the question and answering it] What does paragraph 4 tell us?
	Didi's going to school.
	[Silence]
Wd:	[correcting the answer] Didi's playing at school. Didi's playing at school

As shown in the following script (Appendix 9; transcript 1 lines 31-37)

Jn:	Yes, finished. Who wants to read the text?
Kn:	Mau dibaca ta? /Shall we read it?/
Wd:	Ha? /Pardon?/
Dd:	Perlu ta? /Do we have to read it?/
Wd:	Supaya bisa njelasin nanti. Ayo baca ta? /So that we can explain later. Shall we read it?/

after Jn initiated by asking 'Who wants to read the text?', Kn responded by confirming what was said by Jn. Meanwhile Dd wondered why they needed to read the text. He asked 'Do we have to read it?' This particular response was then acknowledged by Wd who told the reason saying 'So that we can explain later.'

Giving another possible answer is also a way employed by the student to evaluate or acknowledge responses and initiation. After Wd initiated, all the students in the team responded by doing what was 'instructed' – translating the sentence. Since there was another way to translate the sentence, Dd continued giving another translation. Please examine the following script: (Appendix 9; transcript 1 lines 69-72):

Wd:	Kurang satu .. ayo sama-sama. /Still one more sentence. Let's translate it together/

Ss:	He studies again at 9.30. Dia belajar lagi … jam setengah sepuluh. /half past nine/
Dd:	Atau … atau.. jam 9 lebih 30 menit. /Or 30 minutes after 9/

Analysing the script below (Appendix 9; transcript 2 lines 1-6)

Ko:	Aku yang baca ya. /Let me read, OK?/
Se:	Sek ta ngene ae lho, lapo dibaca? /Wait! Why should we read or translate it?/
Ke:	Yo wis. Eh istirahat jam piro? /OK. What time is the break?/

the writer found out that acknowledging responses and initiations was performed by agreeing to the responses. After the idea of Ko to read the paragraph was rejected by Se, Ke showed his agreement to the idea of Se. Ke acknowledged the response by discussing the answer of the question instead of discussing the paragraph.

In the script below (Appendix 9; transcript 2 lines 55-63)

Ko:	Emm 'support your answer' itu mengapa lho, itu kan? /Emm, 'support your answer' means that we are asked about 'why', right?/
Ke:	[translating 'support your answer'] Menyemangati. Semangati, semangati jawabanmu
Ko:	Because.....
Yu:	Eh, maksud'e 'support' itu 'semangati jawabanmu'? /Does it mean 'encouraging your answer'?
Ko:	Apa gini lho, buktikan buktikan jawabanmu. Jadi buktikan apa? /Maybe it means 'prove your answer'. So prove!/ Because he likes..... He likes to save his money. Money money

it is found that Ko at last acknowledged the responses and initiations himself by providing the answer to the question. The word "support' in the question became the center of the discussion. 'Support your answer' was thought to be 'encouraging your answer'. Ko at last used another way to make the word understood. He then used the word 'prove'. Eventually he himself answered the question.

Observing the script below (Appendix 9; transcript 2 lines 104-110)

Yu + Se:	Nomer tiga. /Number 3/ No, because Didi likes saving.....
Ke:	No, no, he doesn't. No, he doesn't
Ko:	No, he does not.
Ke:	Stop. **doesn't** ngono lho /Stop. **doesn't**. Keep this answer/
Ko:	**Does not**
Ke:	**Doesn't** ae lho /Let's use **doesn't**/
Ko:	Gampang gampang /Take it easy/
Yu:	Ga onok bedane, ga onok bedane /There is no difference/

the writer found out that acknowledging responses and initiations was performed by neutralizing the disagreement. The focus of the discussion was 'does not' and 'doesn't'. Ke insisted on the use of 'doesn't', but Ko insisted on the one of 'does not'. Ko and Yu at last tried to evaluate the responses and initiations stating that they had to stop the 'quarrel' as both 'does not' and 'doesn't' are OK.

CHAPTER V
DISCUSSION OF THE FINDINGS

5.1 Discussion of the Findings Related to the First Research Problem

The first research problem of this study says "Is there a significant difference between the reading achievement of young learners taught by using jigsaw technique and the one of those taught by using the non-jigsaw technique?"

The statistical data analysis proved that no significant difference in reading comprehension achievement was found between the students taught by using Jigsaw technique and those taught by using the traditional technique. It then implies that Jigsaw technique did not result in improving the students' reading achievement. The Jigsaw technique did not show significant contribution to the students' reading comprehension. It occurred in both elementary schools: SDK St. Theresia II and SDK Yohannes Gabriel.

The finding of this study was the opposite of the finding of other studies related to Jigsaw technique. Kurnia' (2002) and Sannia's (1998) findings showed that there was improvement in students' reading achievement after the students were taught using Jigsaw.

Further observation on the data obtained from SDK St. Theresia II indicated that in the experimental group the mean score increased from the pretest mean score of 14.69 to the posttest mean score of 15.79. Whereas in the control group, the posttest mean score decreased from the pretest mean score 17.32 to 16.46. To know the significant difference between the pretest and posttest mean scores of each groups, the writer calculated the data by using another t-test formula, paired sample test, assisted by SPSS.

The calculation revealed that the mean scores of the pre and the posttest of the experimental group were significantly different. The significance value of p was found to be .022. Since p .022 was less than .05, there was a significant increase after the treatment in the experimental group. It was implied that jigsaw technique had a potential to improve the students' reading achievement. Whereas in the control group the calculation showed that the mean scores of the pre and the posttest were not significantly different. The significance value of p was found to be .113. Since p .113 was more than .05, there was no significant decrease in the control group.

A possible cause is that adult students need time to adapt themselves to jigsaw activity, the children in this study, moreover, might need more time to adapt themselves to this technique. Although they had experienced group work, they were still not accustomed to working in the expert and home teams. Three meetings were not enough for these students to adapt themselves.

Another cause might be related to the seriousness of the students in working in their home team and expert team. It was found they were chatting, joking and even drawing and playing a game with their friends. They discussed seriously only when the teacher approached them. There were 41 students and only one teacher in the class. It was quite hard for one teacher to monitor 41 students.

Just like the students in the experimental group, the control group students were also active in the question session. They also did the exercises seriously. But on the posttest day, they did not do the posttest seriously. They did it perfunctorily. They remembered that they had ever done the questions on the pretest. Most of these students spent 20 minutes out of 30 minutes, the time allocated. This was the contrary of the experimental group. The experimental group students spent the whole time working on it.

The treatment was done only three times in each experimental and control group. Moreover, it was only once a week. This condition made the students get difficulty in adjusting to the new technique, especially in jigsaw class, since the students never experienced this kind of learning activity.

The students might also have got used to the teaching and learning technique that was usually applied by their English teacher. Therefore, when the writer switched the technique into the new one, the students got confused and did not perform well enough.

Jigsaw technique is a technique in which the students do their activity in groups named expert team and home team. Eventhough the students in this study were old enough to work in groups and had experienced working in groups, they were still not accustomed to working in expert team and home team. The students got confused with what they had to do in the two teams.

In fact, it was quite difficult in making the students work in groups seriously. There were some problems occurred. If for example one of the members of the group was noisy, the other members would be noisy too. Some students sometimes did not want to be in one group with other students whom they did not like. They would be passive; even they did not want participate in the group work at all. The writer needed to handle this condition as soon as possible or it would affect other groups. This was difficult for the writer, since there were too many groups in one class. Sometimes the writer could not pay attention to all groups, so there might be some groups that did not perform well in group work.

5.2 Discussion of the Findings Related to the Second Research Problem

This sub-chapter discusses the findings that answered the research problem which says, "What are the elementary school students' perception on the implementation of Jigsaw technique in their reading class?" Nevertheless, it was necessary to make it cleared that the finding could not be generalized to all elementary school students, although the phrase 'Elementary School Students' was used in the title and the problem of the research problem. These finding were applicable only to 46 students of Yohanes Gabriel and 39 students of SDK St. Theresia II who had filled in the distributed questionnaire. With this limitation, now the writer continues with the discussion of the findings.

All of the respondents at SDK Yohanes Gabriel had positive self-perception on sharing ideas. They claimed their contribution to the group in sharing ideas. They believed that they had shared ideas during their discussion in the expert group. When they were asked to evaluate their friends whether their group mates had shared ideas, three respondents (6.52%) believed that their group mates had not shared ideas. These findings were in line with the ones obtained from interviews. Three respondents believed that their friend had not contributed much in sharing ideas. One of them said, "Ya… TF and AD…they only listen to us". Another respondent claimed, "I'm the one who have given all the ideas with AI." One respondent bravely admitted "……, coz he says in Indonesian …then I translate it into English" (see Appendix 7 transcript 1.1)

He gives the correct answers then I translate it into English.

These findings were supported by the findings from the observation checklist and the video recording. The observers admitted that the majority of the students had shared ideas during the discussion. Through the video recording, it was shown that the students were sharing ideas – they were pointing to the sentence in the text or turning the pages repeatedly. The writer heard through the video recording some students were translating the text to their group mates. There were few of them who seemed to only listen to other ideas. When they were recorded, they were listening to others who were sharing ideas. That was why their group mates believed that they had not shared ideas. Their group mates saw that they only listened to other ideas while they had shared only few ideas or even they had not shared any.

Similar findings were found at SDK St. Theresia II. Most of the students (97.44%) had shared ideas during the discussion in the expert group. The respondents who were

interviewed belonged to those 97.44 % of students. They directly replied, “Yes” when they were asked “Do you share ideas when you discussed in the first group?” The observers had the same opinion about this. They believed that the students were active in sharing ideas. When the respondents were asked, “Do your group mates also share ideas?” Some of the interviewed respondents directly answered “yes”. One of them replied “Of course.”

From the video recording and observation, majority of students had shared ideas during the discussion. Similar to those at SDK Yohannes Gabriel, the students at SDK St. Theresia II were pointing to the selected section in the text while they were sharing ideas. Some students were turning over the sheets repeatedly while they shared or listened to other ideas. One respondent believed that she or he had not contributed much in sharing ideas. This respondent did not realize that every little idea that he or she had shared were important for the discussion. A student believed that their group mates had not shared enough or important ideas during the discussion in their expert team while for other students the idea was quite useful.

In listening to other ideas, the majority of students (97.83%) claimed that they had listened to their group mates when their group mates shared ideas during the discussion so there was only one student at Yohannes Gabriel who had negative self-perception on listening to other ideas. This student admitted that he had not listened to their group mates attentively. Interestingly, the same result of data analysis was obtained. There was one student (2.17%) who believed that her or his groups’ mates had not listened to other ideas attentively. This student saw that her or his group mates occupied themselves with other activities when someone shared ideas.

After having observed the class situation, the observers agreed that the majority of the students were listening to other ideas during the expert groups’ discussion. The students also saw the text when their group mates were sharing ideas. When they agreed or understood with the ideas given, they nodded their heads. The video recording caught this class condition. The observers found out that there were some students who had not listened to other ideas attentively. The video recording being reviewed, it was shown that those students sometimes talked with their friends of other groups but then they continued to listen to their group mates.

The interviewed students claimed that they had listened to their group mates’ ideas and their group mates also had listened to their ideas. One respondent answered, “…they do listen…”

when he was asked “Do your group mates listen to you?” (see Appendix 7 transcript 1.4) Most of the respondents said they did so when they were asked the same question. When these students were asked whether they listened to other ideas, most of them answered that they did. One student was asked for several times to make sure that he really had listened to other ideas. The interviewed respondents had positive self and group perception on listening to other ideas. Although most of the respondents had positive self-perception and group-perception on listening to other ideas, it did not mean that they always listened attentively. Sometimes they talked with the other friends of other groups but then they continued to listen to their group mates. They believed that their group mates had some knowledge and information that they needed to understand the text.

All of the students at SDK St. Theresia II had positive self-perception on listening to other ideas. They believed that they had listened to other ideas. This finding was supported with the result of the interview. Some the interviewed students answered, “Ya, I listen to my group mates” when they were asked “Do you listen to your group mates’ ideas?” One student answered, “Of course Mam”. Surprisingly, there were three students (7.69%) had negative group-perception. They thought that their group-mates had not listened to other ideas. It seemed that the interviewed students belonged to those who had positive group-perception (92.31%). Some of interviewed student said, “Ya” or “Mmm hmmm” when they were asked “Do your group mates listen to your ideas?”

The observers’ opinion was in line with the result of the questionnaire. They believed that during the discussion, the students had listened attentively to other ideas. But still it could not be avoided that students sometimes talked with their other friends. This condition was clearly shown on the video recording. The students did not always listen to others during the discussion– sometimes they talked to one another. Having talked with the other friends, they continued the discussion. They listened to their friends’ ideas by looking at the text and the questions so they could understand the ideas shared. The students who had negative group-perception believed that their group mates were not serious in listening to them. Sometimes their group mates listened but sometimes they talked with other friends. Those who had positive self-perception or group perception believed that every single shared information or idea was important to assist them understand the text during the discussion.

Every member had to help one another to understand the text or paragraph.

items number three and five dealt with self and group-perception on helping others understand the text. Four respondents (8.7%) at Yohanes Gabriel had negative self-perception on helping others. They believed that they had not helped much during the expert groups' discussion. More respondents (13.04%) had negative group- perception. These students believed that group mates had not helped much in understanding the text. The same finding was gotten from the interview. Some interviewed respondents answered positively when they were asked "Do you help your group mates?". One respondent claimed that she only helped in giving the answers of the questions. There were two respondents who replied, "I do not." One of them added that their group mates had already understood the text without his help.

When the interviewed respondents were asked "Do your group mates help you understand the text?", some of them replied, "Yes, they do" One of them answered, "Only those who understand can help me" (see Appendix 7 transcript 1.4). One respondent claimed that her group mates had just given the answer in Indonesian and then she translated it into English. Actually, it was not clearly shown through the video recording whether they had helped others understand the text. There were two different findings from the observation. Two observers believed that the students had helped one another while the other observer believed that the students had not. One observer believed that less than 50 % students had not helped much one another while the other two believed that majority of the students had helped the others. These differences were crosschecked. The class teacher agreed with the two observers that most of the students had helped others understand the text. Students helped one another by translating the text or giving the answers of the questions. All kinds of contribution to the group – translating, giving ideas, or giving the answers – were considered as great help for the groups. Those who had negative self-perception did not realize how they had helped the group understand the text. Those who had negative group-perception did not realize that their group mates had contributed much that helped the discussion easier or even faster.

At SDK St. Theresia II, three respondents (7.69%) had negative self-perception on helping others. They did not believe that they had contributed much to the groups that might help the group mates understand the text. Four respondents had negative group-perception on this issue because they believed that their group mates did not contribute much to help them in understanding the text. Apparently, the interviewed respondents belonged to those who had positive self and group

perception. Those students automatically answered, “Yes, I do.” when they were asked “Do you help your friend understand the text?” They replied the same when they were asked “Do your group mates help you?” The writer then asked, “How do you or they help?” One respondent answered, “I help… they do not know…. so I let them know” Another respondent asked his group mates’ help by saying “ … I don’t know this part… help me.” (see Appendix 7 transcript 2.1).

The observers’ opinion was in line with the respondents’. They saw that the students had helped one another by answering the questions, giving ideas or translating the text. The students who had negative self-perception on helping others did not realize that actually they had already helped their group mates understand the passage although it was only by giving the meaning of a word. They did not know that they had contributed much to the groups. Students who had negative group-perception did not realize that every single contribution from their group mates had helped them understand the text.

The perception in the home group dealt with self-perception and group-perception on explaining ability. The respondents were questioned whether their or their group mates’ explanation was clear and understandable. These perceptions were asked in item number seven and eight.

The majority of the respondents at Yohannes Gabriel (95.65%) believed that they had explained their paragraph clearly so their group mates understand their explanation. The interviewed respondents believed that their group mates understood their explanation. When they were asked about it, some of them replied, “They do.” There were some respondents who were not sure whether their group mates understood their explanation. They said, “I don’t know” Although they were not sure about it, they believed that they had tried to explain clearly. 89.13% of respondents had positive group-perception. This finding was supported by the obtained data from the interview. Most of the interviewed respondents had understood their group mates’ explanation. It meant that their group mates had given understandable and clear explanation. Those who had not understood said, “Some I don’t understand” or “Just a little” (see Appendix 7 transcript 1.5 and 1.3)

Through the eyes of the observers, the majority of the students understood their group mates’ explanation and they also clearly explained to their group mates. The students nodded their heads that showed their understanding to others’ explanation. They also read

the text and the questions again to make sure they understood others' explanation. There was a student who tried to remember his answer by touching his head and reading the text again. This condition was video recorded. The students who gave clear explanation had followed the expert group discussion attentively. Those who did not explain well had not followed the expert group discussion attentively. They did not understand what they had to explain. These students did not realize their responsibility to the success of their group mates. They did not realize that this could impact to their group mates.

The same finding was found after having analyzed the questionnaire answered by respondents of SDK St. Theresia II. The majority of the students (89.74%) had positive self-perception on the clarity of their explanation. These students gave clear and understand able explanation to their group mates. These students had already taken the responsibility to master their paragraph. The respondents who were interviewed were included to those who had positive self-perception. Most of them replied, "…they do…" when they were asked, "Do your group mates understand your explanation?" The majority of the respondents (89.47%) had positive group-perception they believed that their group mates had mastered their own paragraph and their group mates had explained clearly.

Still, there were some students (10.26%) who had negative group-perception. This finding was supported by the finding of the interview. Most of them answered, "I do" when they were asked whether they understood group mates' explanation. Only one respondent replied, "No, because they do not know the answer…". The students who did not give clear and understandable explanation did not master the paragraphs well. The result of the observation supported that most students clearly explained their own paragraphs so the others understood what the paragraphs were about. While their group mates explained to them, they listened and saw the paragraphs explained. Every member was responsible not only for their own success but also for their group mates. When the students mastered the paragraph well, they did clearly explain to their group mates. These students had taken their responsibility for their and groups' success.

Items number 9 and 10 dealt with general perception on Jigsaw. They questioned the respondents' preference and willingness to be taught by using Jigsaw. These two items supported one another. Once they liked the technique they would be willing to be taught by it.

The majority of the respondents (89.13%) at Yohanes Gabriel liked to be taught by using Jigsaw. They enjoyed Jigsaw activities. Fewer students (82.61%) wanted to be taught by using Jigsaw. The students who did not like to be taught by using Jigsaw did not want to be taught by using Jigsaw. Some students who liked to be taught by using Jigsaw were not willing to be taught by using Jigsaw. Some interviewed students admitted that they were not comfortable with the group. One claimed "Yes…" when he was asked "The group mate is uncooperative right?" (refer to Appendix 7 transcript 1.2) They felt that the group mates did not want to work together during the discussion both in the expert and home groups. There was one student who did not like Jigsaw but she was willing to be taught with Jigsaw. She might not like the activities on that day because she got group mates that were difficult to work with. Actually, she liked Jigsaw but that day she had experienced having uncooperative group mates that made her dislike it.

Some students wanted to be taught by using Jigsaw in every meeting of the English subject. One of them wanted to be taught by using Jigsaw as long as the materials were taken from the textbook. The observers believed that the students enjoyed the Jigsaw because they looked enthusiastic in their expert and home groups. Some interviewed students felt that they learnt by playing with Jigsaw technique. One added that Jigsaw could improve their cooperativeness. Another respondent claimed, "…because …it… if not we can't change the group only with those who sit next to us…" (refer to Appendix 7 transcript 1.3) He said that he worked not in pair but also with two different groups. The video recording showed that the students were active during the lesson hence indicating they enjoyed the learning activities. From all these findings, it could be interpreted that Yohanes Gabriel students had positive perception on Jigsaw.

Most of respondents (94.87%) at SDK St. Theresia II liked to be taught by using Jigsaw. They enjoyed the learning activity that used Jigsaw technique. Two (5.13%) respondents did not like to be taught by it. Those who did not like Jigsaw admitted that they did not want to be taught by using Jigsaw. Two respondents who liked Jigsaw did not want to be taught by it. At SDK St. Theresia II, four respondents (10.26%) were not willing to be taught by using Jigsaw. These respondents might have bad experience with Jigsaw. They got group mates who they could not work with so they worked alone during the discussion. One interviewed respondent supported this finding. She got home group mates who did not know what they should explain. They might not follow the expert groups' discussion attentively. She particularly said, "They don't know the answers…" (see Appendix 7 transcript 2.8) She

did not like her group mates not to explain their answers that had been discussed in their expert groups. The respondents who liked Jigsaw but did not want to be taught by using Jigsaw again might feel bored with the Jigsaw so they were not willing to be taught by using Jigsaw. This condition was shown from the video recording that there were some students yawning and rubbing their eyes. Their actions could be interpreted that they felt bored with the activities. The observers, however, saw that most of the students enjoyed the activities because they could work with their friends. This idea was supported by the interviewed respondents who responded positively when they were asked their preference to be taught by using Jigsaw. Some of them answered, "Ya, I like it" when they were asked "Do you like this technique of learning?". Then, they were asked the reasons why they liked Jigsaw. One respondent replied, "I can work in groups" (refer to Appendix 7 transcript 1.5). Another respondent briefly added, "… It's easier to understand the text." (see Appendix 7 transcript 2.5). The respondents' willingness was proved when most of the interviewed respondents claimed, "Every time there is English subject" to the question "How often do you want to be taught by using this technique?" These students wanted to be taught by using Jigsaw in every meeting of the English subject. Accordingly, it could be interpreted that the students of SDK St. Theresia II had positive perception on Jigsaw.

5.3 Discussion of the Findings Related to the Third Research Problem

The classroom interaction patterns existing in the expert team were revealed in the students' discussing the paragraph and its questions. From the findings presented in the previous chapter (more particularly, in 4.3) it was found out that the students initiated by asking others or volunteering themselves to start the discussion. Another way to initiate was reminding others to start. The students responded each other by doing what was expected: reading, answering, translating. Another way was refusing what was expected. The students evaluated or acknowledged responses or initiations by giving correction, giving confirmation, giving other answers, and stopping the discussion. The one evaluating/acknowledging was not always the initiator him/herself.

The discussion in the expert team in young learners' class seemed to work in the use of the students' mother tongue. The students were working differently when the observer was nearby. This was proved by the difference between transcript 1 and transcript 2 (see Appendix 9). Unlike the students at SDK Yohannes Gabriel, the ones at SDK Theresia II did not talk about other things. This was due to the fact that the students

at SDK Yohannes Gabriel was left ‘unattended’ by the observer. Though they diverted, they were guided back by one of them using the initiation way: reminding.

CHAPTER VI
CONCLUSION

This chapter summarizes what has been presented in the precious chapters and provides some recommendation for further studies related to students' perception on the implementation of Jigsaw.

6.1 Summary

In this globalization era, English has become one of important qualifications that Indonesian people must have in order to get a better economic life, since there are many job fields requiring English competence. Realizing the importance of English, Indonesia has tried to implement English in its educational curriculum as early as possible. Consequently, English has become a compulsory subject that is taught starting from elementary school.

There are four basic skills in learning English. They are listening, speaking, reading and writing. One of the basic skills that can make the students become active in exploring and constructing new knowledge is reading. This skill is important for children since they can broaden their background knowledge. In reality, however, many children find difficulties in comprehending a reading passage. Besides the limited time, most teachers still deal with the traditional reading techniques. The teacher holds the main role and thus reducing students' opportunity to participate actively. To overcome the problem above, the teacher is suggested to apply one of the cooperative learning methods. In this study, one of the methods employed is Jigsaw technique.

Some studies about the implementation of Jigsaw technique in reading class have been done. Most of them revealed that there is an improvement of students' reading achievement taught using Jigsaw technique. However, the studies have focused on high school level. This encourages the writers to conduct a study about the implementation of Jigsaw technique in elementary school level. The writers intend to know whether the Jigsaw technique improves the students' reading achievement in lower level of education, especially in the fifth grade of elementary school.

In short, this study is conducted to reveal the effect of the implementation of Jigsaw technique in elementary school level, in this particular study at SDK St. Theresia II and SDK Yohannes Gabriel. The particular objectives of this study are to find out if there is a significant difference between the reading achievement of young learners taught using jigsaw technique and the one of those taught using the traditional technique, to reveal elementary students' perception on the implemented jigsaw technique, and to depict the classroom interaction patterns in jigsaw classroom of young learners,

A quasi-experimental research applying a non-randomized pretest-posttest control group design was administered to obtain the first research objective. The data used in this study were taken from the scores of the reading test of the fifth grade students of SDK St. Theresia II and SDK St. Yohannes Gabriel belonging to the academic year of 2006-2007. As this study was also a descriptive study concerning the second and third objectives, the data were also obtained from the questionnaire, interview, observation, and audio as well as video recordings.

The result of the t-test provided in SPSS for the posttest of the two groups showed that the posttest mean scores between the two groups were not significantly different. It means that there was no significant difference between the reading comprehension achievement of the experimental group taught using Jigsaw technique and the one of the control group taught using traditional technique. This proved that the use of Jigsaw technique in reading class of young learners was not beneficial in improving the students' reading achievement. This happened in both of the schools.

The answers to the items in the questionnaire revealed that all respondents(100%) at SDK Yohannes Gabriel had positive self-perception in sharing ideas while almost all respondents (97.44%) at SDK St. Theresia II did too. All respondents at SDK St. Theresia II (100%) had positive self-perception on listening to others' ideas. Fewer respondents (97.83%) at SDK Yohannes Gabriel had positive self-perception on listening to others' ideas.

The majority of the respondents at SDK Yohannes Gabriel (91.3%) and the one at SDK St. Theresia II (92.31%) had positive self-perception on helping others understand the text during the discussion. Only a small percentage of respondents (8.7 % of respondents at SDK Yohannes Gabriel and 7.69 % of respondents at SDK St. Theresia II) claimed that they did not help others understand the text during the expert groups'

discussion. Only 6.52 % respondents at SDK Yohannes Gabriel and 2.56 % respondents at SDK St. Theresia II had negative group-perception on sharing ideas. These students believed that their group mates did not contribute ideas during the expert groups' discussion.

Most of respondents at SDK Yohannes Gabriel (86.96%) and at SDK St. Theresia II (89.74%) thought that their group mates helped them understand the text during their discussion in the expert group. Asked to respond to the question related to the group mates' attention, 97.83 % respondents at SDK Yohannes Gabriel and 92.31 % respondents at SDK St. Theresia II claimed that their group mates listened to them attentively.

More respondents at SDK Yohannes Gabriel (95.65%) than those at SDK St. Theresia II (89.74%) had positive self-perception on explaining ability. They claimed that they had explained clearly so their group mates understood what they explained. The majority of the respondents at SDK Yohannes Gabriel (89.13%) and SDK St. Theresia II (89.74%) admitted that their group mates explained clearly so the respondents could understand the paragraphs that their group mates explained. Interesting findings were found at SDK Yohannes Gabriel and SDK St. Theresia II. Thirty-seven respondents (94.87%) at SDK St. Theresia II and forty-one respondents (89.13%) at SDK Yohannes Gabriel claimed that they liked to be taught by using Jigsaw. Fewer respondents at SDK Yohannes Gabriel (82.61%) and SDK St. Theresia II (89.74%) were willing to be taught by using Jigsaw. Some respondents who liked Jigsaw were not willing to be taught by using Jigsaw.

This result of data analysis suggests that the majority of respondents had positive perception on the implementation of Jigsaw technique on their reading class. They had not only positive general self-perception on jigsaw but also positive self-perception and group-perception on expert and home groups. These students were willing and preferred to be taught by using Jigsaw technique in their English lesson.

This study reveals that the implementation of Jigsaw technique in reading class did not show beneficial effect on the students' reading comprehension. It was statistically proven that there was no significant difference on the reading comprehension achievement between the students who were taught using Jigsaw technique and the ones who were taught using traditional technique. However, positive perception on jigsaw technique was revealed from the questionnaire distributed.

This study under report also found out that the students initiated the discussion by asking others or volunteering themselves to start the discussion or reminding others to start. The students responded one another by doing what was expected: reading, answering, translating, or refusing what was expected. The students evaluated or acknowledged responses or initiations by giving correction, giving confirmation, giving other answers, or terminating the discussion neutrally.

6.2 Recommendations

Due to numerous reasons, this study is far than perfect. There are factors that should have been taken into account. Accordingly, the following recommendations are worth indicating for further study.

In Jigsaw class, most of the time is spent for the group discussion. It means that the students have to help one another in order to construct and build their knowledge. This might be good for higher-level students, but not for the students in lower level. The background knowledge of young learners is different from the adults. Their background knowledge is still limited. To solve this problem a longer discussion with the teacher after the group discussion is needed to enable the teacher to know the students' understanding about the passage. It will also be easier for the teacher to notice the students' wrong understanding about the passage. This will make the students comprehend the passage better.

One of young learners' characteristics is that they get bored easily. They tend to do just what they like to do. The same technique used by the teacher will make them bored. One of the solutions to overcome this problem is the use of an interesting activity in the end of the lesson, for example, a game. The teacher should make the students consider that the game is a reward for them since they perform well in the lesson given before. This will surely attract the students' attention and encourage them to do well in the next lesson.

The problem that the students do not consider the treatments, quizzes and the posttest after the pretest and first treatment as serious ones can be solved by showing them the scores of their pretest and quiz. It is because the students naturally feel curious with their scores. Knowing their scores will make the students think that the next quizzes and the posttest are important. This will also encourage the students to perform better. If

they know that they get bad score in the pretest or the quiz, it is expected that they will follow the treatment and do the quizzes and posttest better. Therefore, the teacher should let the students know their scores of every test and quiz given.

The treatment given is a short time treatment, so the result might not be as good as the writer's expectations. If the treatment is done in longer time, the students might show different achievement. In implementing a new technique, it needs a quite long time to be able to show its real result for the students.

The treatments in this study are given only three times to both of the groups, experimental and control groups. The population and sample are limited to the certain subjects. And the reading materials are also given in certain parts. In conclusion, the writer realizes that this study is still far for being perfect. Therefore, the writer expects that a further research is conducted by other students using a better research design, with more treatments and a wider subject for getting more complete and valid result.

This study uses the questionnaire that merely covers the closed items that can limit respondents' perception to the options given. Therefore, it is suggested that further studies can make use of questionnaire that covers both closed and open items in order to obtain more descriptive data.

As previously said, this study uses video recordings as one of the instrument. This instrument is conducted only to record the whole class situation during the lesson. It is suggested that it can be used to record the condition or situation in a certain expert and home groups during their discussion in order to obtain more supportive data.

This study is limited to students' perception on Jigsaw after they have experienced Jigsaw for three meetings. Therefore similar studies can be conducted to reveal students' perception on Jigsaw for the first time they experience Jigsaw and after they experience it. Further studies can emphasize on the students' perception at the beginning and the end of the treatment.

This study is limited to reveal elementary school students' perception on Jigsaw technique in reading class. They have experienced the technique only for three meetings. The result of the data analysis shows that majority of the students have positive perception on Jigsaw technique which is new for them. A similar study can be conducted to involve students who have already used Jigsaw as their daily learning activities.

This study is limited to the student interaction in expert team. Further studies can be conducted to see the interaction happening in home team.

In summary, this particular study is not without its weaknesses. Further studies need conducting. More conclusive and descriptive findings can then be presented.

BIBLIOGRAPHY

Aronson, Elliot. 2005. *Jigsaw Classroom*. Retrieved on 3 October 2005 from http://www.jigsaw.org 2000-2005

Aronson, Elliot. 2006. *Jigsaw Classroom*. Retrieved on 21 June 2006 from http://www.jigsaw.org 2000-2006

Bell, Judith. 1993. *Doing Your Research Project: A Guide for First-Time Researchers in Education and Social Science*. Philadelphia: Open University Press

Birley, Graham and Moreland, Neil. 1998. *A Practical Guide to Academic Research.* London: Kogan Page Limited.

Brown, Douglas. 2001. *Teaching by Principles: An Interactive Approach to Language Pedagogy* (2nd ed.). New York: Addison Wesley Longman, Inc.

Brown, James Dean. 1996. *Testing in Language Programs*. New Jersey: Prentice Hall Regents.

Carrel, Patricia and John C. Eisterhold. 1983. "*Schema Theory and ESL Reading Pedagogy*. In Michael H. Long and Jack C. Richards (eds). *Methodology in TESOL; A Book of Readings*. New York: Newbury House Publishers.

Christison, Mary Ann. 1990. Cooperative Learning in the EFL Classroom. *English Teaching Forum*, vol. XVIII, no. 3, July.

Departemen Pendidikan Nasional. 2001. *Kurikulum Berbasis Kompetensi Mata Pelajaran Bahasa Inggris.* Jakarta: Pengarang.

Ebel Robert L. 1979. *Essential of Education Measurement.* Englewood Cliffs: Prentice Hall.

Farrell, Thomas S.C. 2002. *Planning Lessons for a Reading Class.* Singapore: SEAMEO Regional Language Centre.

Gronlund, Norman E. 1982. *Constructing Achievement Tests* (third ed.)New York: Prentice-Hall, Inc.

Hatch, Evelyn and Anne Lazaraton. 1991. *The Research Manual Design and Statistics for Applied Linguistics*. Boston: Heinle and Heinle Publishers.

Hudelson, Sarah. 1999. Literacy Development of Second Language Children. In Orr, Janet K.
Growing up with English. Washington: Office of English Language Program.

Hubbard et al. 1989. *A Training Course for TEFL*. Oxford: Oxford University Press.

Jacobs, G.M., Lee and J. Ball. 1996. *Learning Cooperative Learning via Cooperative Learning*. Singapore: SEAMEO Regional Language Center.

Kagan, Spencer. 1999. The Structural Approach to Cooperative Learning. In Janet K. Orr. *Growing up with English*. Washington: Office of English Language Program.

Kaplan, Eitan. 2002. *Constructivism as a Theory*. Retrieved 20 November 2004 from http://online.sfsu.edu/~foreman/itec800/finalprojects/eitan kaplan/pages/classroom

Key, James P. 1997. *Research Design in Occupational Education*. Retrieved on 19 August 2006 from http://www.okstate.edu/ag/agedcm4h/academic/aged5980a/5980/newpage110.htm

Kurnia, Evy. 2002. *The Effect of Using Cooperative Learning by Using Jigsaw Activities and the Traditional Technique on the Reading Comprehension Achievement of SMU YPPI-1 Students*. Surabaya: Unpublished Thesis Widya Mandala.

Nurhadi. 2004. *Kurikulum 2004: Pertanyaan dan Jawaban*. Jakarta: Grasindo.

Nuttall, Christine. 1996. *Teaching Reading Skills in a Foreign Language* (new edition). Oxford: Heinemann

Rixon, Shelagh. 1994. The Role of Fun and Games Activities in Teaching Young earners. In Christopher Brumfit, Jayne Moon and Ray Tongue. *Teaching English to Children: From Practice to Principle.* London: Thomas Nelson and Sons Ltd.

Sannia. 1998. *The Effect of Cooperative Learning on the Reading Comprehension Achievement of SMU Kristen Petra 3 Students.* Surabaya: Unpublished Thesis Widya Mandala.

Santrock, John W. 1999. *Life Span Development seventh edition*. USA: The Mc Graw Hill Companies.

Silberstein, Sandra. 1987. *Let's Take Another Look at Reading. Twenty Five years of Reading Instruction Diagnostic Teaching in Classroom*. New York: Mc. Millan House Publisher, Inc.

Vale, David and Anne Feunteun. 1995. *Teaching Children English: A Training Course for Teachers of English to Children.* New York: Cambridge University Press.

Ward, James. 1984. Techniques for Teaching Reading, *English Teaching Forum* Vol 18 Number 11, April 2.

Weaver, C. 1994. *Reading Process and Practice: From Socio-psycholinguistics to Whole Language.* Portsmouth, NH: Heinemann

Williams, Marion. 1994. A Framework for Teaching English to Young Learners. In Christopher Brumfit, Jayne Moon and Ray Tongue. *Teaching English to Children: From Practice to Principle*. London: Thomas Nelson and Sons Ltd.

Appendix 1 Research Instrument (The Test)

A) Pretest for the First Try Out

Choose a, b, c, or d to answer the questions or to complete the sentences!

Kevin gets up at five o'clock in the morning. He brushes his teeth at five ten. He takes a bath at five fifteen. He has breakfast at half past five every morning.

Kevin goes to school at six five in the morning. He arrives at school at six forty every morning. The school begins at seven o'clock in the morning. And the school finishes at one fifteen in the afternoon. Kevin arrives at home at two o'clock in the afternoon. He has lunch at ten past two in the afternoon.

At home, Kevin takes a nap at three o'clock. He watches television at five in the afternoon. He has dinner at seven in the evening. He studies at seven thirty. He goes to bed at nine thirty.

1. What does Kevin do at five minutes past five?
   A. He sleeps.
   B. He makes his bed.
   C. He brushes his teeth.
   D. He has breakfast.

2. How long does Kevin take a bath?
   A. fifteen minutes
   B. twenty minutes
   C. five minutes
   D. twenty five minutes

3. What time does Kevin start studying at school?
   A. 06.05 a.m.
   B. 06.40 a.m.
   C. 06.45 a.m.
   D. 07.00 a.m.

4. What time does Kevin arrive home?
   A. 02.00 a.m.
   B. 01.15 a.m.
   C. 02.00 p.m.
   D. 01.15 p.m.

5. Paragraph 1 is about Kevin's activities …..
   A. in the morning
   B. at school
   C. at home
   D. in the afternoon

6. What is the best title for the text?
   A. Kevin's family
   B. Kevin's school
   C. Kevin's activities
   D. Kevin's hobbies

7. When does Kevin have lunch?
   A. 02.10 p.m.
   B. 01.15 p.m.
   C. 03.00 p.m.
   D. 02.00 p.m.

8. The last paragraph tells about Kevin's activities …..
   A. in the morning
   B. in the afternoon
   C. at school
   D. at home

9. What does Kevin do at five in the evening?
   A. He watches television.
   B. He has dinner.
   C. He goes to bed.
   D. He takes a nap.

10. When does Kevin go to sleep?
    A. 07.30 p.m.
    B. 09.00 p.m.
    C. 08.00 p.m.
    D. 09.30 p.m

Hi, I am Tony. I am a student. I am on the fifth grade of elementary. I always wake up at 05.00 a.m. then I take a bath. I always wear uniform and shoes by myself.

I have breakfast at 06.15 a.m. with mother, father and my sister, Ann. There are bread, cookies, milk and orange juice for breakfast. I usually eat cookies and drink milk for breakfast.

Ann and I walk to school at 06.30 a.m. It takes only fifteen minutes. I do not like to come late. I always come fifteen minutes before the bell rings.

1. The reading text tells about……..
   A. mother's activities
   B. father's activities
   C. Ann's activities
   D. Tony's activities

2. What time does wake up?
   A. 05.00 a.m.
   B. 06.15 a.m.
   C. 06.30 a.m.
   D. 07.00 a.m.

3. What time does Tony have breakfast?
   A. 06.15 a.m.
   B. 06.30 a.m.
   C. 07.00 a.m.
   D. 05.00 a.m.

4. Who is Ann?
   A. Tony's sister
   B. Tony's father
   C. Tony's mother
   D. Tony's brother

5. Paragraph 1 tells about……..
   A. going to school
   B. preparing to school
   C. having breakfast
   D. arriving at school

6. Who helps Tony to wear the uniform and shoes?
   A. mother
   B. Tony himself
   C. Tony himself
   D. Ann

7. How many members are there in Tony's family?
   A. 1
   B. 2
   C. 3
   D. 4

8. The last paragraph tells about…….
   A. going to school
   B. preparing to school
   C. having breakfast
   D. arriving at school

9. What time does the school begin?
   A. 07.00 a.m.
   B. 05.00 a.m.
   C. 06.30 a.m.
   D. 06.15 a.m.

10. What does Tony have for breakfast?
    A. milk and cookies
    B. orange juice and cookies
    C. bread and milk
    D. bread and orange juice

My name is Rendi. I live only with my grandmother now. I get up at 05.00 a.m. I go to the bathroom at 05.15 a.m. After I wear my school uniform, I have breakfast. When I go to school at 06.15, my grandmother is still in the bed, sleeping. I ride my bike to school.

I arrive at school at 06.30 a.m. The class starts at 06.45 a.m. I listen to the teacher and do the exercise seriously. I learn many subjects. My favorite subject is English. I learn to read and write in English. I always get good mark in this subject.

I often go to the library. I study there with my new friends, Yoyok and Alvin. We do the homework together. The homework is not easy. We help each other in doing it.

Yoyok and Alvin are my good friends. They make me happy. After school, they often come to my house. We watch television together. We sometimes play football in the field near my house. We also do the homework together. After finishing the homework, we sometimes listen to the music.

1. Paragraph 1 tells about Rendi's……
   A. activities before school
   B. activities after school
   C. study time
   D. best friends

2. With whom does Rendi stay?
   A. his grandmother
   B. his mother
   C. his friends
   D. Yoyok and Alvin

3. When does Rendy wake up?
   A. 05.00 a.m.
   B. 06.00 a.m.
   C. 07.00 a.m.
   D. 08.00 a.m.

4. Rendi is a …….. student
   A. diligent
   B. stupid
   C. lazy
   D. naughty

5. What does his grandmother do at 06.00 a.m.?
   A. She has breakfast.
   B. She still sleeps.
   C. She takes a bath.
   D. She prepares the breakfast.

6. Paragraph 4 tells about Rendi's …..
   A. friends
   B. activities
   C. family
   D. school

7. The best title for the text is Rendi's …..
   A. family
   B. best friends
   C. daily activities
   D. favorite lesson

8. What do Yoyok and Alvin do in Rendi's house?
   A. study
   B. watch television
   C. sleep
   D. play football

9. What do they do after finishing their homework?
   A. watch television
   B. listen to the music
   C. play football
   D. go to the mall

10. How much time does Rendi need to go to school?
    A. 10 minutes
    B. 15 minutes
    C. 20 minutes
    D. 25 minutes

B) Pretest for the Second Try-Out

Choose a, b, c, or d to answer the questions or to complete the sentences!

Kevin gets up at five o'clock in the morning. He brushes his teeth at five ten. He takes a bath at five fifteen. He has breakfast at half past five every morning.

Kevin goes to school at six five in the morning. He arrives at school at six forty every morning. The school begins at seven o'clock in the morning. And the school finishes at one fifteen in the afternoon. Kevin arrives at home at two o'clock in the afternoon. He has lunch at ten past two in the afternoon.

At home, Kevin takes a nap at three o'clock. He watches television at five in the afternoon. He has dinner at seven in the evening. He studies at seven thirty. He goes to bed at nine thirty.

1. What does Kevin do at five minutes past five?
   A. He sleeps. C. He brushes his teeth.
   B. He makes his bed. D. He has breakfast.

2. At 05.17 Kevin.....
   A. brushes his teeth C. takes a bath
   B. gets up D. has breakfast

3. What time does Kevin start studying at school?
   A. 06.05 a.m. C. 06.45 a.m.
   B. 06.40 a.m. D. 07.00 a.m.

4. What time does Kevin arrive home?
   A. 02.00 a.m. C. 02.00 p.m.
   B. 01.15 a.m. D. 01.15 p.m.

5. Paragraph 1 is about Kevin's activities …..
   A. in the morning C. at home
   B. at school D. in the afternoon

6. What is the best title for the text?
   A. Kevin's family C. Kevin's activities
   B. Kevin's school D. Kevin's hobbies

7. When does Kevin have lunch?
   A. 02.10 p.m. C. 03.00 p.m.
   B. 01.15 p.m. D. 02.00 p.m.

8. The last paragraph tells about Kevin's activities …..
   A. in the morning C. at school
   B. in the afternoon D. at home

9. What does Kevin do at five in the evening?
   A. He watches television. C. He goes to bed.
   B. He has dinner. D. He takes a nap.

10. When does Kevin go to sleep?
    A. 07.30 p.m. C. 08.00 p.m.
    B. 09.00 p.m. D. 09.30 p.m.

Hi, I am Tony. I am a student. I am on the fifth grade of elementary. I always wake up at 5 o'clock in the morning, then I take a bath. I always wear uniform and shoes by myself.

I have breakfast at 06.15 a.m. with mother, father and my sister, Ann. There are bread, cookies, milk and orange juice for breakfast. I usually eat cookies and drink milk for breakfast.

Ann and I walk to school at 06.30 a.m. It takes only fifteen minutes. I do not like to come late. I always come fifteen minutes before the bell rings.

1. The reading text tells about……..
   A. mother's activities
   B. father's activities
   C. Ann's activities
   D. Tony's activities

2. What time does get up?
   A. 05.00 p.m.
   B. 05.15 a.m.
   C. 05.15 p.m.
   D. 05.00 a.m.

3. What time does Tony eat in the morning?
   A. half past six
   B. half past five
   C. a quarter past six
   D. a quarter to six

4. Who is Ann?
   A. Tony's sister
   B. Tony's father
   C. Tony's mother
   D. Tony's brother

5. Paragraph 2 tells about Tony's……..
   A. drink
   B. breakfast
   C. fruit
   D. snack

6. Who helps Tony to wear the uniform and shoes?
   A. mother
   B. father
   C. Tony himself
   D. Ann

7. At 06.17, Tony.....
   A. takes a bath
   B. has breakfast
   C. wears shoes
   D. wears uniform

8. The last paragraph tells about…….
   A. going to school
   B. preparing to school
   C. having breakfast
   D. arriving at school

9. What time does the school begin?
   A. 06.15 a.m.
   B. 05.00 a.m.
   C. 06.30 a.m.
   D. 07.00 a.m.

10. What does Tony have for breakfast?
    A. milk and cookies
    B. orange juice and cookies
    C. bread and milk
    D. bread and orange juice

My name is Rendi. I live only with my grandmother now. I get up at 05.00 a.m. I go to the bathroom at 05.10 a.m. After I wear my school uniform, I have breakfast. When I go to school at 06.20, my grandmother is still in the bed, sleeping. I ride my bike to school.

I arrive at school at 06.35 a.m. The class starts at 06.45 a.m. I listen to the teacher and do the exercise seriously. I learn many subjects. My favorite subject is English. I learn to read and write in English. I always get good mark in this subject.

I often go to the library. I study there with my new friends, Yoyok and Alvin. We do the homework together. The homework is not easy. We help each other in doing it.

Yoyok and Alvin are my good friends. They make me happy. After school, they often come to my house. We watch television together. We sometimes play football in the field near my house. After finishing the homework, we sometimes listen to the music.

1. Paragraph 1 tells about Rendi's……
   A. activities before school
   B. activities after school
   C. study time
   D. best friends

2. With whom does Rendi stay?
   A. his grandmother
   B. his mother
   C. his friends
   D. Yoyok and Alvin

3. Rendi's score in English is.....
   A. easy
   B. serious
   C. bad
   D. good

4. Rendi is a …….. student
   A. diligent
   B. stupid
   C. lazy
   D. naughty

5. What does his grandmother do at 06.00 a.m.?
   A. She has breakfast.
   B. She still sleeps.
   C. She takes a bath.
   D. She prepares the breakfast.

6. Paragraph 4 tells about Rendi's …..
   A. friends
   B. activities
   C. family
   D. school

7. The best title for the text is Rendi's …..
   A. family
   B. best friends
   C. daily activities
   D. favorite lesson

8. Where do Yoyok and Alvin go after school?
   A. Yoyok's house
   B. Rendi's house
   C. Alvin's house
   D. my house

9. What do they do after finishing their homework?
   A. watch television
   B. listen to the music
   C. play football
   D. go to the mall

10. How much time does Rendi need to go to school?
    A. 10 minutes
    B. 15 minutes
    C. 20 minutes
    D. 25 minutes

C) The Real Pretest

Choose a, b, c, or d to answer the questions or to complete the sentences!

Kevin gets up at five o'clock in the morning. He brushes his teeth at five ten. He takes a bath at five fifteen. He has breakfast at half past five every morning.

Kevin goes to school at six five in the morning. He arrives at school at six forty every morning. The school begins at seven o'clock in the morning. And the school finishes at one fifteen in the afternoon. Kevin arrives at home at two o'clock in the afternoon. He has lunch at ten past two in the afternoon.

At home, Kevin takes a nap at three o'clock. He watches television at five in the afternoon. He has dinner at seven in the evening. He studies at seven thirty. He goes to bed at nine thirty.

1. What does Kevin do at five minutes past five?
   A. He sleeps.
   B. He makes his bed.
   C. He brushes his teeth.
   D. He has breakfast.

2. What time does Kevin start studying at school?
   A. 06.05 a.m.
   B. 06.40 a.m.
   C. 06.45 a.m.
   D. 07.00 a.m.

3. What time does Kevin arrive home?
   A. 02.00 a.m.
   B. 01.15 a.m.
   C. 02.00 p.m.
   D. 01.15 p.m.

4. Paragraph 1 is about Kevin's activities …..
   A. in the morning
   B. at school
   C. at home
   D. in the afternoon

5. What is the best title for the text?
   A. Kevin's family
   B. Kevin's school
   C. Kevin's activities
   D. Kevin's hobbies

6. When does Kevin have lunch?
   A. 02.10 p.m.
   B. 01.15 p.m.
   C. 03.00 p.m.
   D. 02.00 p.m.

7. The last paragraph tells about Kevin's activities …..
   A. in the morning
   B. in the afternoon
   C. at school
   D. at home

8. What does Kevin do at five in the evening?
   A. He watches television.
   B. He has dinner.
   C. He goes to bed.
   D. He takes a nap.

9. When does Kevin go to sleep?
   A. 07.30 p.m.
   B. 09.00 p.m.
   C. 08.00 p.m.
   D. 09.30 p.m.

Hi, I am Tony. I am a student. I am on the fifth grade of elementary. I always wake up at five to five in the morning then I take a bath. I always wear uniform and shoes by myself.

I have breakfast at 06.15 a.m. with mother, father and my sister, Ann. There are bread, cookies, milk and orange juice for breakfast. I usually eat cookies and drink milk for breakfast.

Ann and I walk to school at 06.30 a.m. It takes only fifteen minutes. I do not like to come late. I always come fifteen minutes before the bell rings.

10. The reading text tells about……..
    A. mother's activities
    B. father's activities
    C. Ann's activities
    D. Tony's activities

11. What time does Tony eat in the morning?
    A. half past six
    B. half past five
    C. a quarter past six
    D. a quarter to six

12. Who is Ann?
    A. Tony's sister
    B. Tony's father
    C. Tony's mother
    D. Tony's brother

13. Paragraph 2 tells about Tony's……..
    A. drink
    B. breakfast
    C. fruit
    D. snack

14. Who helps Tony to wear the uniform and shoes?
    A. mother
    B. father
    C. Tony himself
    D. Ann

15. At 06.17, Tony…….
    A. takes a bath
    B. has breakfast
    C. wears shoes
    D. wears uniform

16. The last paragraph tells about…….
    A. going to school
    B. preparing to school
    C. having breakfast
    D. arriving at school

17. What time does the school begin?
    A. 06.15 a.m.
    B. 05.00 a.m.
    C. 06.30 a.m.
    D. 07.00 a.m.

18. What does Tony have for breakfast?
    A. milk and cookies
    B. orange juice and cookies
    C. bread and milk
    D. bread and orange juice

My name is Rendi. I live only with my grandmother now. I get up at 05.00 a.m. I go to the bathroom at 05.15 a.m. After I wear my school uniform, I have breakfast. When I go to school at 06.15, my grandmother is still in the bed, sleeping. I ride my bike to school.

I arrive at school at 06.30 a.m. The class starts at 06.45 a.m. I listen to the teacher and do the exercise seriously. I learn many subjects. My favorite subject is English. I learn to read and write in English. I always get good mark in this subject.

I often go to the library. I study there with my new friends, Yoyok and Alvin. We do the homework together. The homework is not easy. We help each other in doing it.

Yoyok and Alvin are my good friends. They make me happy. After school, they often come to my house. We watch television together. We sometimes play football in the field near my house. We also do the homework together. After finishing the homework, we sometimes listen to the music.

19. Paragraph 1 tells about Rendi's……
    A. activities before school
    B. activities after school
    C. study time
    D. best friends

20. With whom does Rendi stay?
    A. his grandmother
    B. his mother
    C. his friends
    D. Yoyok and Alvin

21. Rendi's score in English is……
    A. easy
    B. serious
    C. bad
    D. good

22. Rendi is a …….. student
    A. diligent
    B. stupid
    C. lazy
    D. naughty

23. What does his grandmother do at 06.00 a.m.?
    A. She has breakfast.
    B. She still sleeps.
    C. She takes a bath.
    D. She prepares the breakfast.

24. Paragraph 4 tells about Rendi's …..
    A. friends
    B. activities
    C. family
    D. school

25. The best title for the text is Rendi's …..
    A. family
    B. best friends
    C. daily activities
    D. favorite lesson

26. What do they do after finishing their homework?
    A. watch television
    B. listen to the music
    C. play football
    D. go to the mall

Appendix 2: Calculation of Test Reliability

A) The Calculation of Test Reliability of the First Try-Out)

No.	Scores X	Deviations X	Square Deviations x^2	(Raw Scores)^2 x^2
43	30	11	121	900
42	27	8	64	729
41	26	7	49	676
40	26	7	49	676
39	25	6	36	625
38	24	5	25	576
37	23	4	16	529
36	23	4	16	529
35	23	4	16	529
34	23	4	16	529
33	22	3	9	484
32	22	3	9	484
31	21	2	4	441
30	21	2	4	441
29	21	2	4	441
28	20	1	1	400
27	20	1	1	400
26	20	1	1	400
25	20	1	1	400
24	19	0	0	361
23	19	0	0	361
22	19	0	0	361
21	19	0	0	361
20	19	0	0	361
19	18	-1	1	324
18	18	-1	1	324
17	18	-1	1	324
16	17	-2	4	289
15	17	-2	4	289
14	16	-3	9	256
13	16	-3	9	256
12	16	-3	9	256
11	16	-3	9	256
10	15	-4	16	225
9	15	-4	16	225
8	15	-4	16	225
7	15	-4	16	225
6	12	-7	49	144
5	11	-8	64	121
4	11	-8	64	121
3	10	-9	81	100
2	10	-9	81	100
1	8	-11	121	64

Mean = 18.74

Standard deviation = 23.56

No. of test item = 30

$$r = \frac{30}{K-1}\left(1 - \frac{M(K-M)}{K \cdot s^2}\right)$$

Where r = the test reliability; K= the number of items in the test; M = the mean of the test scores; s = the standard deviation of the test scores.

$$r = \frac{30}{30-1}\left(1 - \frac{18.74(30-18.74)}{30 \cdot 23.56}\right)$$

$$r = 1.0345(1 - 0.2986)$$

$$r = 0.7257$$

B The Calculation of Test Reliability of the Second Try-Out

Scores X	Deviations X	Square Deviations x^2	(Raw Scores)^2 x^2
27	9	81	729
27	9	81	729
26	8	64	676
26	8	64	676
24	6	36	576
24	6	36	576
24	6	36	576
24	6	36	576
23	5	25	529
23	5	25	529
22	4	16	484
22	4	16	484
21	3	9	441
19	1	1	361
18	0	0	324
17	-1	1	289
17	-1	1	289
17	-1	1	289
17	-1	1	289
17	-1	1	289
16	-2	4	256
16	-2	4	256
16	-2	4	256
15	-3	9	225
15	-3	9	225
15	-3	9	225
15	-3	9	225
14	-4	16	196
13	-5	25	169
12	-6	36	144
12	-6	36	144
12	-6	36	144
11	-7	49	121
10	-8	64	100
10	-8	64	100
9	-9	81	81
9	-9	81	81
$\Sigma X = 655$	$\Sigma (x - m) = -11$	$\Sigma (x - m)^2 = 1067$	$\Sigma X^2 = 12659$

Mean = 18

Standard deviation = 28.84

No. of test item = 30

$$r = \frac{30}{K-1}\left(1 - \frac{M(K-M)}{K \cdot s^2}\right)$$

Where r = the test reliability; K= the number of items in the test; M = the mean of the test scores; s = the standard deviation of the test scores.

$$r = \frac{30}{30-1}\left(1 - \frac{17.7(30-17.7)}{30 \cdot 28.84}\right)$$

$$r = 1.0345(1 - 0.2516)$$

$$r = 0.7742$$

Appendix 3: The Calculation of Item Difficulty and Item Discrimination

A) The First Try-Out

Item No.	FV	Difficulty Index	D	Discrimination Index
1.	41.86	acceptable	0.23	satisfactory
2.	76.74	easy	0.15	low
3.	41.86	acceptable	0.39	satisfactory
4.	48.84	acceptable	0.31	satisfactory
5.	65.12	acceptable	0.39	satisfactory
6.	58.14	acceptable	1	very effective
7.	62.79	acceptable	0.62	very effective
8.	39.53	acceptable	0.39	satisfactory
9.	48.84	acceptable	0.23	satisfactory
10.	67.44	acceptable	0.46	very effective
11.	90.70	easy	0.23	satisfactory
12.	95.35	very easy	0	low
13.	90.70	very easy	0.08	low
14.	88.37	very easy	0.39	satisfactory
15.	37.21	acceptable	0.08	low
16.	83.72	easy	0.39	satisfactory
17.	62.79	acceptable	0.15	low
18.	37.21	acceptable	0.69	very effective
19.	23.26	difficult	0.62	very effective
20.	69.77	acceptable	0.46	very effective
21.	67.44	acceptable	0.39	satisfactory
22.	48.84	acceptable	0.46	very effective
23.	90.70	very easy	0.08	low
24.	62.79	acceptable	0.54	very effective
25.	67.44	acceptable	0.62	very effective
26.	69.77	acceptable	0.54	very effective
27.	37.21	acceptable	0.23	satisfactory
28.	48.84	acceptable	0.15	low
29.	65.12	acceptable	0.69	very effective
30.	62.79	acceptable	0.15	low

$$FV = \frac{R}{N}$$

Where FV = the index of difficulty; R = correct answer; N = number of testes.

$$D = \frac{correctU - correctL}{n}$$

Where D = the index of discrimination; U = upper group (U 18); L = lower group (L 18); N = number of students in one group

B) The Second Try-Out

Item No.	FV	Difficulty Index	D	Discrimination Index
2.	0.70	acceptable	0.18	low
12.	0.30	acceptable	0	low
13.	0.84	easy	0.36	satisfactory
15.	0.89	very easy	0.36	satisfactory
17.	0.65	acceptable	0.36	satisfactory
23.	0.73	easy	0.46	very effective
28.	0.41	acceptable	0.18	low
30.	0.24	difficult	-0.18	low

$$FV = \frac{R}{N}$$

Where FV = the index of difficulty; R = correct answer; N = number of testes.

$$D = \frac{correctU - correctL}{n}$$

Where D = the index of discrimination; U = upper group (U 18); L = lower group (L 18); N = number of students in one group

Appendix 4: Lesson Plan for the Treatment

for the Experimental Group

LESSON PLAN
(for the first treatment)

Subject	: English
Theme	: Daily Activities
Language Skill	: Reading
Education Level	: Elementary School
Grade/ Semester	: V/ 1
Time Allocation	: 1 x 40 minutes

A. COMPETENCE:
   1. Basic Competence:
      - Students are able to comprehend the reading passage about daily activities

   2. Achievement Indicators:
      Students are able to:
      - find the main idea of each paragraph through the expert group discussion
      - answer the inference questions of each paragraph through the expert group discussion
      - answer the factual questions of each paragraph through the expert group discussion

B. LEARNING MATERIALS: (See Students' Worksheet)

C. TECHNIQUES:
   - Jigsaw
   - Group Work

D. TEACHING AND LEARNING ACTIVITIES: (See the following page)

E. ASSESSMENT:
   Students are asked to find the main idea of each paragraph, answer the inference questions of each paragraph, and answer the factual questions of each paragraph

F. REFERENCES:
   Mukarto, M. Sc. 2003. *Grow with English: An English Course for Elementary School Students Book 5*. Jakarta: Erlangga

TEACHING AND LEARNING ACTIVITIES

Stages	Activities		Time Allotment
	Teacher	Students	
Pre-Instructional Activities	- Greets the students - Asks triggering questions based on the pictures - States the objective of the lesson.	- Respond to the greetings - Answer the triggering questions - Listen to the teacher	3’
Whilst-Instructional Activities	- Divides the class into 3 big groups to form home teams @ 4 students **(In home team session:)** - Distributes the students’ worksheets and questionnaire - Tells the students to read the passage silently. - Form expert teams **(In expert team session:)** - Asks the students to discuss the passage based on the questions given - Asks students to go back to their home teams **(In home team session:)** - Asks the students to share what they have got from the expert teams’ discussion. - Discusses the answers	- Form home teams **(In home team session:)** - Get the students’ worksheets - Read the passage silently - Form expert teams **(In expert team session:)** - Discuss and share the answers - Go back to their home teams **(In home team session:)** - Share the expert teams’ discussion - Discuss the answers	8’ 11’ 10’ 5’
Post-Instructional Activities	- Asks the students to do reading quiz individually	- Do the reading quiz individually	3’

Appendix 4: Lesson Plan for the Treatment

For the Control Group

LESSON PLAN

Subject	: English
Theme	: Daily Activities
Language Skill	: Reading
Education Level	: Elementary School
Grade/ Semester	: V/ 1
Time Allocation	: 1 x 40 minutes

A. COMPETENCE:

1. Basic Competence:
   Students are able to comprehend the reading passage about daily activities

2. Achievement Indicators:
   Students are able:
   - to find the main idea of each paragraph
   - to answer the inference questions of each paragraph
   - to answer the factual questions of each paragraph

B. LEARNING MATERIALS: (See Students' Worksheet)

C. TECHNIQUES:
   - Question and Answer
   - Individual Work

D. TEACHING AND LEARNING ACTIVITIES: (See the next page)

E. ASSESSMENT:
   Students are asked to find the main idea of each paragraph, answer the inference questions of each paragraph, and answer the factual questions of each paragraph.

F. REFERENCES:
   Mukarto, M. Sc. 2003. *Grow with English: An English Course for Elementary School Students Book 5*. Jakarta: Erlangga

TEACHING AND LEARNING ACTIVITIES

Stages	Activities		Time Allotment
	Teacher	Students	
Pre-Instructional Activities	- Greets the students. - Asks triggering questions based on the pictures - States the objectives of the lesson	- Respond to the teacher's greeting. - Answer the triggering questions. - Listen to the teacher.	3'
Whilst-Instructional Activities	- Distributes the students' worksheet. - Asks the students to read the text silently - Asks some students to read the text per paragraph. - Asks the students to find the difficult words per paragraph. - Explains the difficult words. - Asks the students to do the exercises - Discusses the answers	- Get the students' worksheet. - Read the text silently - Some students read the text per paragraph. - Find the difficult words per paragraph. - Listen to the teacher. - Do the exercises - Discuss the answers	1' 4' 4' 20' 5'
Post-Instructional Activities	- Asks the students to do reading quiz individually.	- Do the reading quiz individually.	3'

Appendix 5

A) The Pre and Posttest Scores of the Experimental and Control Groups at SDK St. Theresia II (before data reduction)

Student's Number	Experimental group		Control Group	
	Pretest	Posttest	Pretest	Posttest
1	10.00	15.00	16.00	12.00
2	16.00	22.00	15.00	17.00
3	11.00	13.00	22.00	20.00
4	23.00	21.00	22.00	12.00
5	21.00	22.00	20.00	25.00
6	15.00	13.00	10.00	15.00
7	9.00	11.00	17.00	9.00
8	9.00	12.00	14.00	10.00
9	6.00	8.00	.	9.00
10	14.00	10.00	25.00	25.00
11	18.00	11.00	10.00	15.00
12	20.00	17.00	13.00	17.00
13	17.00	.	17.00	16.00
14	15.00	12.00	20.00	19.00
15	9.00	19.00	15.00	16.00
16	20.00	20.00	19.00	17.00
17	16.00	13.00	13.00	12.00
18	4.00	5.00	20.00	18.00
19	22.00	17.00	15.00	16.00
20	9.00	10.00	21.00	19.00
21	14.00	17.00	20.00	20.00
22	11.00	15.00	.	17.00
23	23.00	23.00	24.00	23.00
24	13.00	15.00	.	23.00
25	11.00	13.00	22.00	22.00
26	5.00	12.00	18.00	15.00
27	16.00	14.00	21.00	17.00
28	22.00	23.00	17.00	19.00
29	15.00	19.00	21.00	23.00
30	23.00	24.00	16.00	.
31	15.00	16.00	10.00	.
32	11.00	14.00	21.00	.
33	15.00	17.00	23.00	22.00
34	12.00	15.00	21.00	21.00
35	11.00	16.00	12.00	7.00
36	14.00	17.00	9.00	10.00
37	20.00	21.00	16.00	13.00
38	20.00	21.00	15.00	13.00
39	10.00	20.00	22.00	19.00
40	14.00	13.00	10.00	9.00
41	15.00	.	19.00	18.00
42			9.00	14.00
43			19.00	13.00

B) The Pretest and Posttest Scores of the Experimental and Control Groups at SDK St. Theresia II (after Data Reduction; also used as the data for ANCOVA computation later)

	Experimental group		Control Group	
	Pretest	Posttest	Pretest	Posttest
1	10.00	15.00	16.00	12.00
2	16.00	22.00	15.00	17.00
3	11.00	13.00	22.00	20.00
4	23.00	21.00	22.00	12.00
5	21.00	22.00	20.00	25.00
6	15.00	13.00	10.00	15.00
7	9.00	11.00	17.00	9.00
8	9.00	12.00	14.00	10.00
9	6.00	8.00	25.00	25.00
10	14.00	10.00	10.00	15.00
11	18.00	11.00	13.00	17.00
12	20.00	17.00	17.00	16.00
13	15.00	12.00	20.00	19.00
14	9.00	19.00	15.00	16.00
15	20.00	20.00	19.00	17.00
16	16.00	13.00	13.00	12.00
17	4.00	5.00	20.00	18.00
18	22.00	17.00	15.00	16.00
19	9.00	10.00	21.00	19.00
20	14.00	17.00	20.00	20.00
21	11.00	15.00	24.00	23.00
22	23.00	23.00	22.00	22.00
23	13.00	15.00	18.00	15.00
24	11.00	13.00	21.00	17.00
25	5.00	12.00	17.00	19.00
26	16.00	14.00	21.00	23.00
27	22.00	23.00	23.00	22.00
28	15.00	19.00	21.00	21.00
29	23.00	24.00	12.00	7.00
30	15.00	16.00	9.00	10.00
31	11.00	14.00	16.00	13.00
32	15.00	17.00	15.00	13.00
33	12.00	15.00	22.00	19.00
34	11.00	16.00	10.00	9.00
35	14.00	17.00	19.00	18.00
36	20.00	21.00	9.00	14.00
37	20.00	21.00	19.00	13.00
38	10.00	20.00		
39	14.00	13.00		

C) The appendix is available at the writers
D) The appendix is available at the writers

Appendix 6 Research Instrument

Nama : _____

Kelas/ no : / _____

Tanggal : _____

Kalimat- kalimat di bawah ini menunjukkan keadaan proses belajar di kelompok tadi:

Pilih **1** bila adik-adik **sangat tidak setuju** dengan kalimat tersebut

Pilih **2** bila adik-adik **tidak setuju** dengan kalimat tersebut

Pilih **3** bila adik-adik **setuju** dengan kalimat tersebut

Pilih **4** bila adik-adik **sangat setuju** dengan kalimat tersebut

EXPERT TEAM (KELOMPOK AHLI)				
1) Saya juga ikut memberikan ide-ide saat berdiskusi	1	2	3	4
2) Saya mendengarkan dengan penuh perhatian kepada teman yang menyampaikan idenya	1	2	3	4
3) Saya membantu teman sekelompok saya untuk memahami bacaan	1	2	3	4
4) Teman-teman saya ikut serta menyampaikan ide-ide saat berdiskusi	1	2	3	4
5) Teman-teman saya juga membantu saya dalam memahami bacaan	1	2	3	4
6) Teman-teman saya mendengarkan saya dengan penuh perhatian saat saya menyampaikan ide	1	2	3	4

HOME TEAM (KELOMPOK UMUM)				
7) Saya memberikan penjelasan yang mudah dimengerti	1	2	3	4
8) Teman-teman saya memberikan penjelasan yang mudah dimengerti	1	2	3	4
CONCLUSION (KESIMPULAN)				
9) Saya senang dengan kegiatan belajar tadi	1	2	3	4
10) Saya ingin belajar dengan cara belajar seperti ini	1	2	3	4

Nama : Kenzo

Kelas/ no : VA/20

Date : 6 October 2006

Kalimat- kalimat di bawah ini menunjukkan keadaan proses belajar di kelompok tadi:

Pilih **1** bila adik-adik **sangat tidak setuju** dengan kalimat tersebut

Pilih **2** bila adik-adik **tidak setuju** dengan kalimat tersebut

Pilih **3** bila adik-adik **setuju** dengan kalimat tersebut

Pilih **4** bila adik-adik **sangat setuju** dengan kalimat tersebut

EXPERT TEAM (KELOMPOK AHLI)	
1) Saya juga ikut memberikan ide-ide saat berdiskusi	1 2 3 (4)
2) Saya mendengarkan dengan penuh perhatian kepada teman yang menyampaikan idenya	1 2 3 (4)
3) Saya membantu teman sekelompok saya untuk memahami bacaan	1 (2) 3 4
4) Teman-teman saya ikut serta menyampaikan ide-ide saat berdiskusi	1 2 3 (4)
5) Teman-teman saya juga membantu saya dalam memahami bacaan	1 (2) 3 4
6) Teman-teman saya mendengarkan saya dengan penuh perhatian saat saya menyampaikan ide	1 2 3 (4)

HOME TEAM (KELOMPOK UMUM)	
7) Saya memberikan penjelasan yang mudah dimengerti	1 2 3 (4)
8) Teman-teman saya memberikan penjelasan yang mudah dimengerti	1 (2) 3 4
CONCLUSION (KESIMPULAN)	
9) Saya senang dengan kegiatan belajar tadi	1 2 (3) 4
10) Saya ingin belajar dengan cara belajar seperti ini	1 2 3 (4)

Appendix 7: Interview Transcript

Data 1
Setting: Yohanes Gabriel Elementary School. It was 6th October, 2006 when a reading class was going on at Class VA. That day was the last meeting they were taught by using Jigsaw. The students worked and discussed in home teams and expert team. In this third meeting, the questionnaire was distributed along with the worksheet. In the expert team, the students discussed the paragraph that assigned to them. Having discussed in the expert teams, the students filled in the questionnaire (questions 1-6). They returned to their home team and shared what they had discussed in the expert teams. Having shared their expertise in the home team, the students filled in the questionnaire again (questions 7-10). The text was discussed together, and then the students did the quiz. After the class, nine students were interviewed to strengthen their answers of the questionnaire. The interview was done in Indonesia. It was recorded.

Note: I= Interviewer; R= Respondent. Segments highlighted in bold indicate audibly enhanced stress; intend segments signify overlapping speech. Segments between < > indicate the brief inserted speech made by the interviewer repeating/revealing the main part of the students' answer. Segment between [ ] indicate the writer's additional note. The first transcribed data are written in Indonesia. They are then translated into English. Students' real names are not used. Instead initials are used and underlined.

Transcript 1.1
Student A1

I : When you discuss in the expert team... over there....
R: Ya
I : Do you share ideas?
R: Yes I do
I : <Yes>, do you listen.... wait do your group mates share ideas?
R: Mmm .. ya
I : Who does share ideas?
R:... HN
I : **Only you with HN**?
R: Ya... TF and AD... they only listen to us....
I : Emmm when HN shares ideas do you listen to him?
R: Yah not bad, ... coz he says in Indonesian ... then I translate into English
I : OK...I see .. then… they.. what're their names?… AD and TF right, Do they listen to you when you share ideas?
R: They do…but…they want to write the answers … that is not allowed by Mam Ervin so… they don't write
I : Don't they?
R: They don't….just memorize
I : Do you help them understand the text?
R: I don't
I : Don't you help?
R: Just give the answers
I : Ow, it considers as help… by giving the answers. It considers as a help. Do your group mates help you?
R: emmm....
I : How about HN?

R: Mmm hmmm only him
I : Only HN?
R: He gives the correct answers than I translate it into English.
I : Mmm. When you are in this group [home team]
R: Yes
I : Do you… explain… explain to your group mates?
R: Yes
I : Do they understand?
R: Yes, they do
I : When your group mates give their answers…. Who are they?
R: ST and AN who give their answers.. but AN…[inaudible]
I : Do you understand?
R: Yes, I do
I : Do you like this way of learning [using Jigsaw]
R : Yes, I do
I : Why?
R: It's fun
I : Is it? Why? Is it because group work … or … you can understand more…
R: It's fun, that's all
I : It is fun right, just like learning by playing?
R: Ehh hmmm but don't like the quiz
I : Pardon?
R: The quiz makes us think…
I : But… if you discuss well, you can do the quiz right?
R: I don't like it [the quiz]
I : [Gigling]… are you willing to be taught by using this technique?
R: Yes
I : How often
R: From now on…till the end of the education year

Transcript 1.2
Student B1

I :HN right?
R: ya
I : number?
R: 46
I :<46>, this….when you are in group with her right [pointing FL]
R: Ya
I : Do you share ideas?
R: Yes
I : Your group mates?
R: ….AD and TF do not share ideas….just…
I : Just FL….?
R: Yup
I : Who shares ideas?
R: [Inaudible]
I : Then, when you share ideas, do your group mates listen to you?
R: Yes
I : Then when FL shares ideas, do you listen to her?
R: Yes, I do

I : Do you help you group mates that time [during expert team dicussion]
R: Yes, I do
I : Your group mates?
R: They help too.
I : Ok, then.. when you go back to home team… do you give clear and understandable explanation?
R: Yes
I : How about your group mates?
R: But… but… they do not understand. When I return to the first group … there is PT who doesn't listen
I : She does not listen?
R: Ya
I : Do you understand when they explain to you?
R: No, I don't
I : Do you like this way of learning [using Jigsaw]
R: I do [seem not sure]
I : Do you like it or not? For this meeting…
R: Not bad..
I : So there's must be something that you don't like…
R: **Ya**
I : Are you willing to be taught like this [using Jigsaw]
R: Yup
I: What you don't like about this meeting…..?... because of the groups or yourself…?
R: The group
I: The group is uncooperative right?
R: yes
I: Ok, that's all thanks

Transcript 1.3
Student C1

I: KZ
R: Ya
I: Do you share ideas when you are grouped with KN?
R: Mmm you've asked it
I: Ya… I'll ask once again
R: Ya
I: Your group mates, KN, YA, and SH, do they share ideas?
R: Yes
I: **Do they**?
R: Hhmmm emmm
I: Do they listen to you?
R: It seems they listen
I: <It seems they listen>, do you listen to them?
R: **Of course**
I: Ooh, hmm. You don't help your friends right?
R: For the text?
I: When you are with….
R: Ya... with SH. They've already understood the text
I: They don't help you eithr…because you've knew it
R: Yup

I: **Excelent**! When you go back to home team, do you explain to them? With whom are you grouped…? ….the one which is not with KN…. The other group
R: AG.
I: Ya
R: MM, WL
I: When you explain do they understand?
R: Yes
I: Then… when they explain to you, do you understand?
R: Just a little
I: Most part you don't undertsand?
R: Yes
I: Do you like this way of learning [Jigsaw]
R: Yes
I: Why?
R: Because…..it, … if not we can't change the groups only with those who sit next to us….[inaudible]
I: It's fun because not only two persons…
R: Yes
I: Are you willing to be taught like this [using Jigsaw]… but.. the materials are taken from the text book?
R: Yes
I: That's all. Thanx
R: You're welcome

Transcript 1.4
Student D1

I: When you work in group…that… the group….who are your group mates?
R: IV, MR and AT
I: In that group, do you share ideas? Give ideas?
R: Yes
I: Your group mates?
R: Some of them….
I: Do you listen to them when they share ideas?
R: I listen to them
I: When you share ideas, do they listen to you?
R: Mmm… ya… they do listen…[inaudible]
I: Do you help your group mates undertsand the text?
R: I do
I: Your group mates?
R: Only those who understand can help
I: It means there are some who don't understand?
R: Ya
I: Ok, when you return to the group which are firstly formed… you with…...
R: YA, BL and SN
I: In that group, you explain your paragraph to them. Do they understand?
R: Yes, they do
I: When they explain theirs, do you understand?
R: I do
I: Do you like this way of learning?
R: Not really
I: Are you willing to be taught by using this technique?

R: Yup...
I: Why do you not really like it?
R: Because I get bad group mates
I: So, because the groups. Ok then, thanx.

Transcript 1.5
Student E1

I: What's your number SH?
R: 37
I: When you are with KN, KZ, do you share ideas?
R: Yes, I do share
I: How about them?
R: Yes, they do too
I: Do you listen to them when they share ideas?
R: Yes, I listen
I: Do they listen to you?
R: Hmmm em
I: Are you sure?
R: Yes
I: <Ya>, do they help you understand the text?
R: Very helpful
I: <Very helpful>
R: KN talks too much
I: Aah.., KN. It's usual
R: Yes
I: Your group mates, do you help them?
R: Yes I do
I: Do they help you too?
R: Hhe..emm
I: When you return to the other group, not with this one [not with expert team]
R: Yes
I: Do you explain your part?
R: Yes
I: Your part is paragraph….?
R: 1
I: When you explain, do they understand?
R: Yes, they do
I: Oh.. then your group mates, when they explain their parts who get number 2, 3, or 4, do you understand?
R: Some I don't understand
I: How many you no't understand?
R: 1
I: Only one person you don't understand?
R: Heee emm
I: Do you like this way of learning?
R: Yes
I: **Do you?**
R: Yes
I: Are you willing… emm… I mean, why you like this way of learning?
R: Cause can discuss…, Mam
I: Can work in groups?
R: Hee...eh

I: Are you willing to be taught like this?
R: Yes
I: How often? From now on?
R: Yes
I: Ok then

Transcript 1.6
Students F1
I: Your number 16 right?
R: Yup
I: when you discuss with… who?.... RL?
R: Ya
I: Do you share ideas?
R: Ya, I do share
I: Then do your group mates share ideas?
R: Ya, they do
I: **Do they?**
R: Hee mmm
I: When they share ideas, do you listen to them?
R: Yes
I: When you share ideas, do they listen to you?
R: ...emm yeah
I: Yes or no?
R: **Yes**
I: <Yes>, do you help your friend?
R: No I don't
I: Do you just give ideas?
R: Yes
I: Do your group mates help you?
R: Yes
I: Really really help you?
R: **Yes**
I: When you go back in group with KN
R: Ya
I: With KN, EW, do you explain to them?
R: Yes, I do
I: Do they understand?
R: They do understand
I: Then, they explain to you?
R: Ya
I: Do you understand?
R: I do
I: Do you like this way of learningi?
R: hehehe..hehe [gigling] I don't know
I: Well, do you like it? Are you willing to ba taught in this way?
R: Ya
I: <You are willing>, it means you like it right?
R: Yes
I: <Yes>, …but you don't know the reason why you like it. Why? is it fun?
R: …I can work with friends
I: <Work with friends>, help each other, right?
R: Yes
I: That's all. Thanx

Transcript 1.7
Student G1
I: Well, KN what number?
R: 19
[wait for a while]
I: Do you share ideas when you discuss with KZ and YA?
R: Mmm... yes I do
I: How about YA,KZ and SH, do they share ideas to you?
R: Yeah
I: Do you listen to them?
R: Yes, I do
I: Do you?
R: Ya
I: **Do you**?
R: **Yaa.. ya I listen**
I: Do they listen to you? Do they listen to you?
R: Ya
I: <Ya>, do you help them?
R: Ya
I: Be serious!
R: [laughing]
I: Do you help them?
R: Ya
I: Do they help you?
R: Ya...ya..
I: How?
R: Ya...ya..
I: …by giving meaning….or…
R: Emmm …sharing ideas
I: Who does help you much?
R: Ya
I: Who does help you much?
R: Ya
I: Who does help you much?
R: Ya,.. YA
I: **Ya?**
R: Ya
I: When you're back in a group with IV, EW and who is the other one?
R: KH
I: KH?
R: Ya
I: Do you explain to them? Do you?
R: Ya
I: Do they understand?
R: Yes, they do
I: Do you explain it clearly?
R: Ya
I: Then, they explain to you too?
R: Ya
I: Do you understand?
R: Some I don't understand
I: Do you like this way of learning?
R: Yes

I: Why? Why you like it?
R: Ya, because it train our mutual cooperation
I: Hha..ha..ha [laughing]
R:… **work together**
I: Ok, do you want to learn like this?
R: Yes, I do
I: That's all, thanks

Transcript 1.8
Student H1

I: When you discuss with KZ and KN, do you share ideas?
R: ehm mm. yes I do.
I: How about them?
R: So do they
I: Do they help you understand the text?
R: Emm …**Yes**
I: Do you help them?
R: Emm …ya
I: In the group, who does help much?
R: Emmm who is he.., KN maybe
I: When you share ideas…. do they listen to you?
R: Yes
I: Are you sure?
R: Ya
I: Do you listen to them when they share ideas?
R: Yes
I: **Do you?**
R: Yes
I: Then you go back to home team,… with whom are you?
R: RL, SN and BL
I: With RL?
R: Ya
I: **RL**?
R: RL…, RL
I: Do you give understandable explanation to them?
R: I don't know
I: How come, do you feel that you have explained it clearly?
R: Yes
I: Are you sure?
R: Hee.. eh
I: When they explain to you?
R: Clearly
I: Do you understand?
R: He eh
I: Do you like this way of learning?
R: Yes
I: Why?
R: No reason
I: There must be a reason. The others say their own reasons,… because of this… that…
R: I just like it
I: Why?

R: No reason
I: Is it because group work… or can undertsand more… or….?
R: Because it's group work
I: Really
R: Hee eh
I : Do you want to be taught like this again?
R: He eh

Transcript 1.9
Student I9

I: DG, right?
R: Ya
I With whom are you grouped?
R: With DN…., ….and….DN,…AI and JC
I: Ok, they are the group mates with whom you discuss for the first time?
R: Yes
I: Do you share ideas at that time?
R: I'm the one who give all the ideas with AI
I: You with…?
R: AI
I: Wait, DG what's your number?
R:47
I: <47>, here it is. You with AI
R: Hee eh
I: Your group mates, who do share ideas?
R: AI
I: Just both of you?
R: He eh
I: Mmm do they listen to you when you share ideas?
R: Yes, they do
I: **Do they?**
R: Yes
I: Then.. they…, I mean do you listen to them… who is he… AI?Do you listen to him?
R: Yes, I do
I: Do you help you group mates understand the text?
R: Yes, I do
I: Do they help you?
R: Yes, they do
I: Very helpful or… ya just help..
R: Ya… just help..
I: Then… go back to the other group with… ND and who…?
R: AL
I: <With AL>, do you explain to them your paragraph, right?
R: Ya
I: What number do you get?
R: 1
I: You explain to them, do they undersand?
R: Yes, they do.
I: Are you sure?
R: Hee ehh
I: When they explain to you, do you understand?

R: I do
I: Are you sure?
R: I'm sure
I: **AL can explain to you …then.. you understand?**
R: ND don't have time to explain
I: <ND don't have time to explain>. How about AL? …he explains then.. you understand?
R: Yes
I: Do you like this way of learning?
R: **Of course**
I: Why?
R: It's fun
I : How you can say it's fun
R: Discussion… grop work
I: Are you willing to be taught by using this technique
R: …..mmm….don't know…
I: How come…., the materials won't be difficlult. It is taken form the textbook but we use this technique,… work in groups…. divide in groups
R: [inaudible]
I: Sorry?
R: Yes, I'm willing
I: **Really**?
R: Yeah

Data 2
Setting: Santa Theresia 2 Elementary School. It was 12th October, 2006 when a reading class was going on at Class VB. That day was the last meeting they were taught by using Jigsaw. The students worked and discussed in home teams and expert team. In this third meeting, the questionnaire was distributed along with the worksheet. In the expert team, the students discussed the paragraph that assigned to them. Having discussed in the expert teams, the students filled in the questionnaire (questions 1-6). They returned to their home team and shared what they had discussed in the expert teams. Having shared their expertise in the home team, the students filled in the questionnaire again (questions 7-10). The text was discussed together, and then the students did the quiz. After the class, eight students were interviewed to strengthen their answers of the questionnaire. The interview was done in Indonesia. It was recorded.

Note: I= Interviewer; R= Respondent. Segments highlighted in bold indicate audibly enhanced stress; intend segments signify overlapping speech. Segments between < > indicate the brief inserted speech made by the interviewer repeating/revealing the main part of the students' answer. Segment between [ ] indicate the writer's additional note. The first transcribed data are written in Indonesia. They are then translated into English. Students' real names are not used. Instead initials are used and underlined.

Transcript 2.1
Student A2

I : What's your name?
R: KR
I : You have filled in this [questionnaire]…., right
R: Yup

I : < Ya >. I wanna ask you some questions… Do you share ideas during the discussion [in the expert team]?
R: Emmm,… ya
I : < Ya >. You…. .. No, I mean your group mates… the same group with you….
R: Ya…
I : Share ideas? Do they share ideas?
R: They do
I : Do you listen to them… when you.. emm I mean when they share ideas..?
R: … ya… mmm ya
I : If it's true you should say **Ya**. Your answer seems that you're not sure..
R: **Ya**
I : Ok, then… your group mates, do they listen to you when you speak?
R: Yes
I : Are you sure?
R: Mmm hmmm
I : Do you help your group mates when you during the discussion [in the expert group]?
R: Yes,.. I do help
I : Sorry?
R: I help
I : What do you help?
R: I help… they don't know … so let them know
I : What don't they know?
R: So.. I help them..
I : Ok,… do your group mates help you?
R: Mmm hmmm
I : How do they help you..?
R: I say… I don't know this part… help me
I : <You don't know certain part, they help you> I see.., then you go back to the other group… with whom are you grouped… those who sit in front..?
R: Mm ya
I : That group, you explain to your group mates, right..?
R: Yup
I : < Ya > Do they understand?
R: Yes, they do
I : When your group mates explain,.. do you understand?
R: Ya,, hmm
I: Do you?
R: [He nods his head]
I : Do you like this way of learning?
R: Yes, I do
I : Why?
R: It's fun
I : Why do you like it?
R: Coz... can work in groups
I : < Can work in groups> are you willing to be taught by using this technique again?
R: Ya
I : Pardon?
R: **Ya**

Transcript 2.2
Student B2

I : Ok, have you filled in this [questionnaire]?
R: Yup
I : I'll ask you now. Do you share ideas during the discussion with your group mates?
R: I do
I : Really?
R: **Ya**
I : Your group mates?
R: **Of course they do**, Mam
I : Which group mates….Who are they?
R: WD, JS, and KR
I : Ya ,right. Mmm…. When you give ideas, do they listen to you?
R: Yes, they do listen
I : They do not talk each other?
R: **No**
I : When your group mates share ideas, do you listen to them?
R: **Of course**, Mam
I : Really?
R: **Of course**.
I : **You**?
R: **You don't believe it**
I : Do you help your group mates here [during the expert team's discussion]
R: Yes of course
I : <Ya>, How?
R: Mmm ….someone asks me .. .so… I help in giving the answers
I : How about your group mates… do they help?
R: Yes, they help much
I : All of them help you?
R: Ya sort of
I : When you're back to the other groupp…with those who sit at the back in the corner…
R: Ya
I : you explain to them your paragraph, ...right?
R: **Ya**
I : Do your group mates explain theirs?
R: Ya, they do explain
I : Do you understand it?
R: Yes, I do
I : <You do>. Is there abything you don't understand?
R: [He just shakes his head]
I : Do you like to learn like this [by using Jigsaw]?
R: I like it
I : Why?
R: Coz…it's fun and exciting
I : Exciting? Why so exciting?
R: Coz… I can gather with friends
I : < Ow, ….gather with friends…> Are you willing to be taught like this [by using Jigsaw]
R: I'd love to
I :Why?
R: Coz… **it's fun**

Transcript 2.3
Student C2

I : WD, right?
R: Ya
I : Have you filled in this [questionnaire]?
R: I have
I : Now,.. I'm checking your answer. Mm… you .. number…?
R: 38
I : < 38 >, then… do you give ideas during the expert team discussion [in the expert group]?
R: I do
I : Your group mates?
R: They do
I : Is there anyone who don't share ideas?
R: No one
I : All share ideas?
R: Yup
I : Ok, do you listen to them when they share ideas…?
R: Mmm hmmm
I : Do they listen to you?
R: Yes
I : Are you sure?
R: **Ya**
I ; Don't they talk each other?
R: No, they don't
I : OK, do you help your group mates here [during the discussion in the expert team]
R: Yes
I : Do they help you?
R: Yes, they do
I : How do they help you…, how?
R: Just discuss together…. work together
I : < Work together > do all of them work?
R: Yes
I : When you go back inside…..
R: Mmmm hmmm
I : Who are you group mates?
R: They…
I : With whom?
R: The other group…..
I : Ya, they are…?
R: YS, DR and PT
I : Ya Do you explain to them?
R: Ya
I : Do they understand?
R: They do
I : When they explain their own paragraph..
R: **Of course,** I understand
I : **Do you**?
R: Hmmm mmm
I : Sorry?
R: I understand
I : Do you like this way of learning [using Jigsaw]?
R: I do

I : Why?
R: Coz, can learn by playing
I : < learn by playing > are you willing to be taught like this [using Jigsaw]
R: I'd love to
I : How often do you want to be taught by using this technique?
R: As much as it can
I : How's about your English lesson?
R: Ya ….just like that…

Transcript 2.4
Student D2

I : What's you name?
R: My name is JS
I : You number?
R: My number is 13
I : <13>, you have filled in this [questionnaire],..right?
R: I have
I : Ok, when you are discuss [in the expert group], do you share ideas?
R: Yup
I : <you do> your group mates?
R: They do
I : **All of them**?
R: Yup
I :When they share ideas,.. do you.. listen to them?
R: Yes
I : How about DV, WD and KR, do they listen to you when you give the ideas?
R: They do listen
I : Do they?
R: Yes
I : Do you help them?
R: [inaudible]
I : Do you help them?
R: I do
I : Do you?
R: **Ya**
I : Do they help you?
R: They do
I : How they help?
R: mmm… sharing ideas….. [inaudible]….translating.. [inaudible]…… explaining
I : Then.., you go back into the other group .. which you are not with DV, WD and KR,…..do you explain to your group mates?
R: [inaudible]
I : Pardon?
R: I do explain
I : Do you?
R: Yes
I : <Ya> then they explain to you?
R: Yes, they do
I : <They do>
R: There is one of them who don't explain.
I : One don't explain?

R: Ya
I : Do you like this way of learning [using Jigsaw]?
R: I do like
I : <You do>, are willing to be taught by using this technique?
R: I'd love to
I : How often do you want to be taught like this [using Jigsaw]
R: In every meeting of the English subject
I : **What?** Who will teach?
R: Just like today.
I : Why do you like this way of learning?
R: Coz.. the technique…[inaudible]

Transcript 2.5
Student E2

I : Have you filled in this [questionnaire]
R: Hmm
I : What's your name?
R: My name is BL
I : In the first group,… which you… I mean what's number do you get?
R: 1, Cherry 1
I : <Cherry 1>, in Cherry 1.. ..do you share ideas?
R: I do
I: Your friend?
R: Yes, they do
I : They share ideas too?
R: Mmm Hmmm
I : When they… I mean do they listen to you when you share ideas?
R Ya,…but sometimes they just listen a little. They don't listen attentively
I: How about you? Do you listen to them?
R: Of course, I do
I: Do you help them?
R: **Absolutely**
I : Do they help you?
R: Yes
I : How do they help?
R; Mmm… what is it…mmmm understand the text easier. It's easier to understand the text
I : Is it? Is it easier?
R: Ya, it is
I : In group it becomes easier?
R: Yes
I : Then go back to another group…. those who…..
R: Home team
I : <Ya.. in home teams>, when you explain your paragraph… do you… do they … your group mates understand it?
R: Yes, they do
I : When your group mates explain do you understand?
R: Yup
I : Do you?
R: Yes I do
I : Is there anyone who don't explain?
R: No one,… but actually the time is not enough.. then…. luckily….

I : It's enough?
R: He can manage to explain his paragraph.
I : Do you like this way of learning [using Jigsaw]
R: I do.. but not quite often
I : <not quite often>?
R: Don't be too often… maybe….once a month
I : Why do you like this way of learning?
R: Coz… it's easier to understand the text

Transcript 2.6
Student F2

I : What's your name?
R: IV
I : In the group, what number do you get?
R: 1
I : Which one? Cherry, Banana, or Apple?
R: Cherry
I : The same group with BL …then
R: Yeah
I : In Cherry 1, do you share ideas?
R: I do
I : Your group mates?
R: Mmmm….
I : .. her…? [pointing at BL] Does she share?
R: Ya
I : Do you listen to your group mates when they share ideas?
R: Yes
I : When you share ideas, do they listen to you?
R: They do listen
I : Do you help your group mates understand the text?
R: Yes, I do help
I : Do your group mates help you?
R: Yes they do
I : How do they help?
R: …. They help…translate into Indonesian
I : <Translating into Indonesia>, then go back to another group. Do you explain to your group mates your part number one?
R: Yes
I : Do they understand?
R: Yes, they do
I : When they explain, do you understand it?
R: I do
I : Is there anyone who don't explain?
R: None
I : All of them explain?
R: Mmm hmmm
I : Do you like this way of learning?
R: Yes I do
I : Why?
R: It's fun
I : <Fun>, are you willing to be taught by using this technique?

R: **Of course, I am**
I : Really?
R: Ya
I : Ok, how often? Once a month or in every meeting of the English subject..
R: In every meeting of the English Subject
I: Thank you

Transcript 2.7
Student G2

I : What team do you belong?
R: Mmmm… group..
I: What's number?
R: 3
I : Which one?
R: Banana 3
I: <banana 3>
R: Mmm hmm
I : In Banana 3, do you share ideas?
R: Yes
I: <You do>, do your group mates share ideas?
R: Yes
I : Do they?
R: Yes
I : When they share ideas, do you listen to them?
R: Yes
I : When your group mates,…emm, I mean .. when you share ideas, do they listen to you?
R: Mmmm …ya
I : It seems you're not sure…
R: When we want to answer the questions with … our own groups …the first group…the first time we're grouped….
I : Which one?.… the one.. which is not Banana 3..?
R: No.. which is…
I : Ok, now talking about Banana3 first.
R: OK
I : Do they listen to you?
R: Yes they do
I : Do they?
R: Ya
I : Do you help your group mates understand the text?
R: Yes
I : Do they help you?
R: Hmm
I : How do they help?
R: Each of them explain the answers
I: <Explain their own answers>
R: Ya
I : Then you return to the group of four [home team], do you explain to your group mates?
R: yes
I : Do they understand?
R: They do
I : When they explain to you, do you understand?

R: Yes
I : Do all of them explain?
R: Yes
I : Do you like this way of learning [using Jigsaw]?
R: Mmmmm
I : Do you like it or not?
R: Not really
I : Pardon?
R: So and so
I: Why?
R: Emm because when discuss with the other group,… there are some of them who don't listen to others
I : <There are some who don't want to listen>
R: Ya
I : Are you willing to be taught by using this technique?
R: Yeah, I'd love to
I : How often? Once a month,…every meeting of the English subject or…
R: Sorry, what do you mean?
I : You want to be taught in this way everyday, every meeting of the English subject or only…
R: Every meeting of the English Subject

Transcript 2.8
Student H2
I : VN, your nick name VN?
R: Yes
I: What number do you get?
R: 3
I : Which 3?
R: Banana 3
I :<In Banana 3>, do you share ideas?
R: Yes
I : Do you?
R: Yeah
I : Then when…., wait,… do you friend share ideas?
R: Emm No
I : <They don't>
R: Wait.. ..they do
I: … You say they don't, ok do they share ideas?
R: Yup,..mmm hmmm
I : Group mates in Banana 3?
R: Ya
I : Do you listen to them when they share ideas?
R: Mmmm hmmm
I : When you share ideas, do they listen to you?
R:Yes
I : Really?
R: Mm hmm
I : Ok, how many members are in the group?
R: 3
I : <3 persons>. Then… do you help them?
R: Ya
I : Do they help you?

R: Yes
I : How do they help?
R; Emm when I ask ‘how about this one?’ they tell me. They say, ‘the answer is…’
I : I see. Then you go back to the group of 4 [home team]. You give your answer to your group mates, right?
R: Yes
I : Do you explain to them?
R: Yes
I : Do they understand?
R: Yes
I : When they explain to you, do you understand?
R: **No**… because they don’t know the answers…
I : <They don’t know>… do you like this way of learning [using Jigsaw]?
R: I do
I : Why?
R: I think… I can understand the text faster
I : It is faster because not only you who think about the answers
R: Yes
I : Are you willing to be taught by using this technique?
R: Ya
I : How often? Is it every time you have English subject or once a month or twice a month?
R: Every meeting of English subject.

Appendix 8 Observation Checklist

OBSERVATION CHECKLIST

School : _____ Teacher : _____
Class : _____ Technique: _____
Date : _____ Observer : _____

Put check (√) to the right column of scale

Activities	Scale			
Expert team	1	2	3	4
1. Sharing ideas or information				
2. Paying attention to group mates' ideas or information				
3. Helping Group mates to understand the text				
Home team	1	2	3	4
4. Clearly explaining the text to the group mates				
5. understanding group mates' ideas				
Over all	1	2	3	4
6. Liking the class activities by using Jigsaw				

Note:
4- Strongly agree
3- Agree
2- Disagree
1- Strongly disagree

OBSERVATION CHECKLIST

School : Yohanes Gabriel
Class : VA
Date : 6th October 2006

Teacher : Ong Ervina
Technique : Jigsaw
Observer : Linda Anggraiani

Put check (√) to the right column of scale

Activities	Scale			
Expert team	1	2	3	4
1. Sharing ideas or information				√
2. Paying attention to group mates' ideas or information			√	
3. Helping Group mates to understand the text			√	
Home team	1	2	3	4
4. Clearly explaining the text to the group mates			√	
5. understanding group mates' ideas			√	
Over all	1	2	3	4
6. Liking the class activities by using Jigsaw			√	

Note:
4- Strongly agree
3- Agree
2- Disagree
1- Strongly disagree

OBSERVATION CHECKLIST

School : Yohanes Gabriel
Class : VA
Date : 6th October 2006

Teacher : Ong Ervina
Technique : Jigsaw
Observer : Siti Mina Tamah

Put check (√) to the right column of scale

Activities	Scale			
Expert team	1	2	3	4
1. Sharing ideas or information				√
2. Paying attention to group mates' ideas or information				√
3. Helping Group mates to understand the text				√
Home team	1	2	3	4
4. Clearly explaining the text to the group mates			√	
5. understanding group mates' ideas			√	
Over all	1	2	3	4
6. Liking the class activities by using Jigsaw				√

Note:
4- Strongly agree
3- Agree
2- Disagree
1- Strongly disagree

OBSERVATION CHECKLIST

School : Yohanes Gabriel
Class : VA
Date : 6th October 2006

Teacher : Ong Ervina
Technique: Jigsaw
Observer : Fransiska Dian A

Put check (√) to the right column of scale

Activities	Scale			
Expert team	1	2	3	4
1. Sharing ideas or information			√	
2. Paying attention to group mates' ideas or information			√	
3. Helping Group mates to understand the text		√		
Home team	1	2	3	4
4. Clearly explaining the text to the group mates			√	
5. understanding group mates' ideas			√	
Over all	1	2	3	4
6. Liking the class activities by using Jigsaw			√	

Note:
4- Strongly agree
3- Agree
2- Disagree
1- Strongly disagree

OBSERVATION CHECKLIST

School : Santa Theresia 2
Class : VB
Date : 12th October 2006

Teacher : Elisa Yani
Technique: Jigsaw
Observer : Siti Mina Tamah

Put check (√) to the right column of scale

Activities	Scale			
Expert team	1	2	3	4
1. Sharing ideas or information				√
2. Paying attention to group mates' ideas or information				√
3. Helping Group mates to understand the text			√	
Home team	1	2	3	4
4. Clearly explaining the text to the group mates			√	
5. understanding group mates' ideas			√	
Over all	1	2	3	4
6. Liking the class activities by using Jigsaw				√

Note:
4- Strongly agree
3- Agree
2- Disagree
1- Strongly disagree

OBSERVATION CHECKLIST

School : Santa Theresia 2
Class : VB
Date : 12th October 2006

Teacher : Elisa Yani
Technique: Jigsaw
Observer : Linda Anggraiani

Put check (√) to the right column of scale

Activities	Scale			
Expert team	1	2	3	4
1. Sharing ideas or information			√	
2. Paying attention to group mates' ideas or information				√
3. Helping Group mates to understand the text			√	
Home team	1	2	3	4
4. Clearly explaining the text to the group mates			√	
5. understanding group mates' ideas			√	
Over all	1	2	3	4
6. Liking the class activities by using Jigsaw				√

Note:
4- Strongly agree
3- Agree
2- Disagree
1- Strongly disagree

Appendix 9 Expert Team Discussion Transcript

Data 1 for Research Question 3

Setting: A group of 4 students (one of the expert teams formed in a classroom at 'T' Elementary School) was carrying out their task, namely to understand a paragraph of a text. It was October 12, 2006 when the reading class took place. The title of the text discussed was **Didi's Morning Activities**. It consisted of 4 paragraphs and some comprehension questions. The chosen expert team was assigned to discuss the last paragraph. They were asked to go out of the classroom to do their task (This was done to ensure the recoding was clear enough, not disturbed by the noise of the other teams' discussion). The observer - in this case the writer – once in a while interfered.

Here is the last paragraph of the text and the comprehension questions:

The break time is at 9.15. Students run out from their classes so does Didi. Didi plays football with his 5 friends. He does not go to the canteen. He likes to save his money. He studies again at 9.30.

- What does paragraph 4 tell us? Didi's …
    a) playing at school
    b) going to school
- What does Didi do in the break time?
- Does Didi buy some food at school? Support your answer
- How long is the break time?

What does paragraph 4 tell us? Didi's playing at school

Note: T = Teacher; Dd = a 9-year-old student who was talkative and clever and tending to dominate conversation; Jn = a 9-year-old student who was an active student; Wd = a 9-year-old student who was smart, and diligent; Kn = a 10-year-old student who was an 'average' student; Ss = students. Segments underlined indicate the sentences appearing in the text or the ones written in the student's worksheet. Segments highlighted in bold indicate audibly enhanced stress; indented segments (started with ---) signify overlapping speech. Segments between < > indicate the brief inserted speech made by the students repeating/revealing the main part of the answer; segments between / / indicate the translation of the previous part. Segments between [ ] indicate the writer's additional note.

Transcript 1.1

Line No.		
1	T:	You know what to do, right?! Now try to help one another. Saling bantu ya [try to help
2		one another] so that you can share later. OK you can start now. Semua nanti harus
3		memahami nomor ini, paragraph ini, harus ngerti no. 4 ini. /All of you should understand
4		this paragraph, understand number 4/
5	Dd:	Ayo kamu dulu
6	Jn :	[reading the question and answering it] <u>What does paragraph 4 tell us? Didi's</u> going to
7		school.
8		[Silence]
9	Wd:	[correcting the answer] <u>Didi's playing at school.</u> <u>Didi's playing at school</u>
10		[Silence]
11	Dd:	<u>Didi's playing at school</u>
12	Jn:	- [reading the question and answering it] What does Didi do in the break time?
13		<u>Didi plays football with his 5 friends. He does not go to the canteen.</u>
14	Dd:	[repeating] <u>He plays football with his 5 friends but he .. but he doesn't go to the</u>
15		<u>canteen.</u>
16	Kn :	[repeating] <u>He plays football</u>
17	Dd:	[reading the question and answering it] <u>Does Didi buy some food at school?</u> No, he
18		doesn't.
19		[Silence]
20	Ss:	<u>No, he is.. No, he doesn't. No, he doesn't.</u>
21	Kn:	[reading the question and answering it] Number 4. <u>How long is the break time?</u>
22	Ss:	15 minutes. 15 minutes.

23	Jn:	[trying to go back to question 3 as another question was left unanswered] Number 3,
24		number 3. Number 3 He is .. No he doesn't because he likes to save his money
25	Dd+Kn:	Number 3 No, he doesn't <ya> <ya> because he likes to save his money
26	Dd	Iya [Yes], because he likes to save his money
26	T:	You know 'save'?
28	Ss:	[students are translating] 'menabung'
29	T:	Yes.
30	Kn:	Uwes ya? /Finished?/
31	Jn:	Yes, finished. Who wants to read the text?
32	Kn:	Mau dibaca ta? /Shall we read it?/
33	Wd:	Ha? /Pardon?/
34	Dd:	Mau dibaca ta? /Shall we read it?/
35	T:	Finished? Finished? You still have time. Go on talking about the paragraph. Discuss it.
36		Make sure you understand it.
37	Wd:	Supaya bias njelasin nanti. Ayo baca ta? /So that we can explain later. Shall we read it?/
39	Ss:	[reading the paragraph together] The break time is at 9.15. Students run out from their
40		classes so does Didi. Didi plays football with his 5 friends. He does not go to the canteen.
41		He likes to save his money. He studies again at .. at 30
42	Dd:	Half past thirty
43	Ss:	[correcting] Half past nine, half past nine.
44	Dd:	Nggak jelasno ta. ngerti ta? Ngerti ta? Ngerti kamu? /What about translating it? Do you
45		understand? Do you understand?/
46	Dd:	Not yet.
47	Dd:	The break time is at 9.15. Students run out from their classes so does Didi. Didi plays
48		football with his 5 friends. He does not go to the canteen. He likes to save his money. He
49		studies again at half past two.
50	Wd:	half past nine
51	Dd:	Ya. aku bilang half past nine
52	T:	You know the meaning of all words?
53	Ss:	Yes
54	Kn:	Diartino ta /shall we translate it?/
55	Dd:	Pada waktu … /when…/
56	Wd:	Sik, sik, ada 4 paragraf. Ya, satu satu. Satu kalimat, satu kalimat. /Wait. Wait. There 4
57		paragraphs. Yes, one by one. One sentence, one sentence/
58	Dd:	Ya, 4 kalimat. /yes, 4 sentence/
59	Jn:	[counting] 1, 2, 3, 4. Siapa dulu? ada berapa kalimat? /Who's first? How many sentence?
60	Dd:	5 kalimat /5 sentence/
61	Jn:	Oh ya. /yes/
62	Kn:	[reading and translating] The break time is at 9.15. Istirahatnya jam 19 lebih 15.
63	Dd:	Students run out from their classes so does Didi. Murid-murid keluar kelas … [silence]
64		Murid-murid keluar kelas, juga Didi.
65	Dd:	Didi plays football with his 5 friends. Didi bermain sepakbola bersama dengan 5
		temannya.
66	Jn:	He does not go to the canteen. Dia tidak pergi ke kantin.
67	Kn:	He likes to save his money. Dia menyimpan uangnya. Dia menyimpan uangnya.
68	Wd:	[translating] Dia suka … Dia suka menyimpan uangnya.
69		[reminding] Kurang satu .. ayo sama-sama. /Still one more sentence. Let's translate it
70		together/
71	Ss:	He studies again at 9.30. Dia belajar lagi … jam setengah sepuluh. /half past nine/
72	Dd:	Atau … atau.. jam 9 lebih 30 menit. /Or 30 minutes after 9/
73	T:	You still have time. Make sure everyone knows the answer.
74	Wd:	Ayo the question /come on, lets go on with the question/
75	Ss:	[reading the question one by one and the anwers]
76		What does paragraph 4 tell us? Didi's …going to school
77		What does Didi do in the break time? He plays football with his 5 friends
78		Does Didi buy some food at school? No, he doesn't. He does not go to the canteen.
79		because he likes to save his money. How long is the break time? 15 minutes
80	T:	How do you know it's 15 minutes?
81	Ss:	Because … because they play until half past nine.
82	T:	So you can share what you have read to your friends later

Data 2 for Research Question 3

Setting: A group of 4 students (one of the expert teams formed in a classroom at 'YG' Elementary School) was carrying out their task, namely to understand a paragraph of a text. It was October 6, 2006 when the reading class took place. The title of the text discussed was **Did's Morning Activities**. It consisted of 4 paragraphs and some comprehension questions. The chosen expert team was assigned to discuss the last paragraph. They were asked to go out of the classroom to do their task (This was done to ensure the recoding was clear enough, not disturbed by the noise of the other teams' discussion). The observer just watched them from the distance..

Here is the last paragraph of the text and the comprehension questions:

The break time is at 9.15. Students run out from their classes so does Didi. Didi plays football with his 5 friends. He does not go to the canteen. He likes to save his money. He studies again at 9.30.

- What does paragraph 4 tell us? Didi's …
    a) playing at school
    b) going to school
- What does Didi do in the break time?
- Does Didi buy some food at school? Support your answer
- How long is the break time?

Note: T = Teacher; S = student; Ss = students. Segments underlined indicate the sentences appearing in the text or the ones written in the student's worksheet. Segments highlighted in bold indicate audibly enhanced stress; indented segments (started with ---) signify overlapping speech. Segments between < > indicate the brief inserted speech made by the students repeating/revealing the main part of the answer; segments between / / indicate the translation of the previous part. Segments between [ ] indicate the writer's additional note.

Ke was 9 years old. He was quite smart, humorous, humble, diligent and cooperative. [He had no initiative]
Ko was 9 years old. He was diligent, smart, creative and cooperative. His English achievement was the best among his friends'. [He had no initiative]
Se was 10 years old. She was quite smart, active cooperative. She was a bit impatient and talkative. [She had initiative]
Yu was 10 years old. She was quite smart, creative and cooperative. She was a bit quiet and humble.

Appendix 10: Calculation of the Pretest Scores

A) *t-test* for Non-Independent Samples calculation of the Pre-test scores – SDK St.Theresia II

Independent Samples Test of the Pretest Scores

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
pretest scores	Equal variances assumed	.192	.662	-2.57	79	.012	-2.74	1.064	-4.854	-.620
	Equal variances not assumed			-2.58	78.3	.012	-2.74	1.062	-4.851	-.623

Since p (.012) < .05, the null hypothesis was rejected; the pretest mean scores of the reading test of the two groups were significantly different.

B) *t-test* for Non-Independent Samples calculation of the Pretest scores – SDK Yohanes Gabriel

Appendix 11: Calculation of ANCOVA for the scores of pre-post tests at SDK St Theresia II

Tests of Between-Subjects Effects

Dependent Variable: Post Total

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	849.485[a]	2	424.742	44.907	.000
Intercept	146.282	1	146.282	15.466	.000
Pre	841.099	1	841.099	88.928	.000
Factor	24.682	1	24.682	2.610	.111
Error	690.450	73	9.458		
Total	21285.000	76			
Corrected Total	1539.934	75			

a. R Squared = .552 (Adjusted R Squared = .539)

Since p (.111) > .05, the null hypothesis was rejected; the posttest mean scores of the reading test of the two groups were not significantly different.

Note: the calculation is based on the data presented in Appendix 5 B